# **EXHIBIT U**

**NEW ISSUE – BOOK-ENTRY ONLY** 

# \$300,202,930

# Employees Retirement System of the Government of the Commonwealth of Puerto Rico Senior Pension Funding Bonds, Series C

The Employees Retirement System of the Government of the Commonwealth of Puerto Rico (the "System") is a trust created by law in 1951 by the Legislature of the Commonwealth of Puerto Rico to provide pension and other benefits to retired employees of the government of the Commonwealth and its instrumentalities. These benefits are funded by contributions made monthly or twice a month to the System by the government of the Commonwealth and its instrumentalities ("Employer Contributions") and their employees, and by investment earnings. Government employers are currently required by law to make Employer Contributions to the System of at least 9.275% of their covered payroll.

The System has authorized the issuance of one or more series of bonds (the "Bonds") in order to increase the funds currently available to pay pension benefits to certain of its beneficiaries and reduce its unfunded accrued actuarial pension liability. On January 31, 2008, the System issued the first such series of Bonds, which consisted of \$1,588,810,799.60 aggregate principal amount of Senior Pension Funding Bonds, Series A (the "Series A Bonds"). On June 2, 2008, the System issued the second of such series of Bonds, which consisted of \$1,058,634,613.05 aggregate principal amount of Senior Pension Funding Bonds, Series B (the "Series B Bonds"). The System is now offering its Senior Pension Funding Bonds, Series C (the "Series C Bonds"). The System has pledged all Employer Contributions made after the date of issuance of the Series A Bonds to the payment of the Bonds. The System will invest the proceeds of the Bonds and use these investments and the earnings thereon to provide pension benefits to its beneficiaries.

The Bonds are limited, non-recourse obligations of the System payable solely from and secured solely by a pledge of Employer Contributions made after the date of issuance of the Bonds. The Bonds are not payable from the investments made by the System with the proceeds of the Bonds or from any other assets of the System, or from employee contributions to the System. The Bonds are not an obligation of the Commonwealth of Puerto Rico or any of its other instrumentalities or political subdivisions.

The Series C Bonds will be registered under the Depository Trust Company's book-entry only system, and will be issued without coupons, in denominations of \$5,000 principal amount (maturity amount in the case of the Capital Appreciation Bonds) and integral multiples thereof. Purchasers of the Series C Bonds will not receive bond certificates.

The Series C Bonds will be offered as Term Bonds and Capital Appreciation Bonds. Interest on the Term Bonds will be payable monthly on the first day of each month, commencing on August 1, 2008. Interest on the Capital Appreciation Bonds will compound semiannually on each January 1 and July 1, commencing on January 1, 2009 and will be payable at maturity or redemption. The inside cover page of this Official Statement contains information on the maturities, interest rates and prices or yields of the Series C Bonds. The Series C Bonds may be redeemed by the System, commencing on July 1, 2018, as described herein.

Interest on the Series C Bonds is not excludable from the gross income of the recipients thereof under Section 103(a) of the United States Internal Revenue Code of 1986, as amended. Interest on the Series C Bonds is exempt from Puerto Rico income and property taxes. See "Tax Matters" beginning on page 46.

The System expects that the Series C Bonds will be available for delivery to DTC on or about June 30, 2008.

Investing in the Series C Bonds involves risks. See "Investment Considerations" beginning on page 22 of this Official Statement for a discussion of certain factors that should be considered by prospective purchasers in evaluating an investment in the Series C Bonds.

# **UBS Financial Services Incorporated of Puerto Rico**

Popular Securities BBVAPR MSD Lehman Brothers Samuel A. Ramírez & Co., Inc.

Citi Merrill Lynch & Co. Scotia Capital Santander Securities
Eurobank MSD
Oriental Financial Services Corporation
Wachovia Capital Markets, LLC

# \$300,202,930

# Employees Retirement System of the Government of the Commonwealth of Puerto Rico Senior Pension Funding Bonds, Series C

# \$2,202,930 Capital Appreciation Bonds

Maturity	<b>Initial Principal</b>	Maturity	Yield to
July 1,	Amount	Amount	Maturity
2030	\$2,202,930	\$9,000,000	6.50%

# \$298,000,000 Term Bonds

Maturity	Principal	Interest	
July 1,	Amount	Rate	Price
2028	\$110,000,000	6.15%	100%
2038	45,000,000	6.25%	100
2043	143,000,000	6.30%	100

No dealer, broker, sales representative or other person has been authorized by the System or the underwriters to give any information or to make any representations other than those contained herein and, if given or made, such other information or representations must not be relied upon as having been authorized by the System or the underwriters. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of the Series C Bonds by any person in any jurisdiction in which it is unlawful for such person to make such an offer, solicitation or sale. The delivery of this Official Statement at any time does not imply that the information contained herein is correct as of any time subsequent to its date. The information set forth herein has been obtained from the System and other sources that are believed to be reliable. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the System since the date hereof.

The Underwriters have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their respective responsibilities to investors under the Federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

IN CONNECTION WITH THE OFFERING OF THE SERIES C BONDS, THE UNDERWRITERS MAY EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICES OF THE SERIES C BONDS AT LEVELS ABOVE THOSE WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

# FORWARD-LOOKING STATEMENTS

This Official Statement contains certain "forward-looking statements" concerning the System's operations, performance and financial condition, including its future economic performance, plans and objectives and the likelihood of success in developing and expanding its business. These statements are based upon a number of assumptions and estimates which are subject to significant uncertainties, many of which are beyond the control of the System. The words "may," "would," "could," "will," "expect," "anticipate," "believe," "intend," "plan," "estimate" and similar expressions are meant to identify these forward-looking statements. Actual results may differ materially from those expressed or implied by these forward-looking statements.

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# **SUMMARY STATEMENT**

This summary highlights information contained elsewhere in this Official Statement. Prospective purchasers of the Series C Bonds should read the entire Official Statement, including the "Investment Considerations" section beginning on page 22 of this Official Statement.

#### The Commonwealth of Puerto Rico

The Commonwealth of Puerto Rico (the "Commonwealth") is an island with an area of approximately 3,500 square miles and a population of over 3.5 million people located in the Caribbean, approximately 1,600 miles southeast of New York City. It is a Commonwealth of the United States that came under U.S sovereignty in 1898 as a result of the Spanish-American War. Puerto Ricans have been citizens of the United States since 1917.

As a Commonwealth, the United States and Puerto Rico share a common market and a common currency (the U.S. dollar). The Commonwealth exercises virtually the same control over its internal affairs as do the 50 states of the United States. However, the people of Puerto Rico do not vote in U.S. national elections. They are represented in the U.S. Congress by a non-voting Resident Commissioner. Most U.S. taxes are not levied in Puerto Rico, and Puerto Rico residents do not pay U.S. income tax on income from Puerto Rico sources.

The Constitution of the Commonwealth provides for a republican form of government in which power is shared among an Executive, a Legislative and a Judicial branch. The Commonwealth also constitutes a District within the United States Federal court system, and has its own United States District Court.

The Commonwealth's gross national product was \$58.7 billion in fiscal year 2007 (preliminary, in current dollars) or \$13,491 per capita (preliminary, in current dollars). The economy of Puerto Rico is closely linked to that of the United States. During fiscal year 2007, approximately 77% of Puerto Rico's exports went to the United States mainland, which was also the source of approximately 50% of Puerto Rico's imports. The dominant sectors of the Puerto Rico economy in terms of production and income are manufacturing and services.

The Commonwealth is a frequent issuer in the United States municipal market. As of May 7, 2008, Puerto Rico's public sector debt (including debt issued by government-owned utilities and other government instrumentalities) was \$49.4 billion.

For a more detailed description of the Commonwealth, see the "Commonwealth Report," which is incorporated by reference in this Official Statement.

# The System

The System is a trust created by Act No. 447 of May 15, 1951 of the Legislature of Puerto Rico (as amended, the "Act"). The purpose of the System is to provide pension and other benefits to retired employees of the departments and agencies of the Commonwealth and its public corporations and municipalities (collectively referred to as "Government Employers"). These benefits are funded by contributions made to the System by the Government Employers ("Employer Contributions") and their employees, and by investment earnings. The Act currently requires Government Employers to make Employer Contributions to the System of at least 9.275% of their payroll for employees covered by the System. The current contribution rate has been in effect since February 1990; prior to that date,

Commonwealth departments, agencies and public corporations were required to make Employer Contributions of at least 8% of their payroll for employees covered by the System, while municipalities were required to make Employer Contributions of at least 7% of their payroll. The Commonwealth has not reduced the contribution rate at which Government Employers are required to contribute to the System since 1960.

As of June 30, 2007, the System had 176,837 participating employees employed by 210 Government Employers, and provided retirement benefits to 99,851 beneficiaries, which consist of retirees and spouses of deceased retirees. As of the same date, the System's net assets held in trust for pension plan benefits were \$2.891 billion.

# Plan of financing

The System has authorized the issuance of Bonds from time to time in order to increase the funds currently available to pay benefits under the System's largest benefit plan, a defined benefit plan that has been closed to new participants since December 31, 1999, and to reduce the unfunded accrued actuarial pension liability of this benefit plan. As of June 30, 2005, which is the latest date as of which an actuarial report for the System exists, the System had \$2.328 billion in net assets available for plan benefits while its accrued actuarial liabilities amounted to \$12.284 billion, resulting in a \$9.956 billion unfunded accrued actuarial liability and a corresponding funding ratio of 19%. In order to reduce the plan's unfunded actuarial accrued liability, the System will add the proceeds from the sale of the Bonds to the assets that are invested for the benefit of participating employees, retirees and beneficiaries. By increasing the funds currently available to pay benefits under this closed defined benefit plan, the System anticipates that it will be able to fund benefit payments for a longer period than its existing assets would allow it to do without an increase in the percentage of payroll that Government Employers are required to contribute to the System.

The Series C Bonds will be offered exclusively in Puerto Rico. The System may in the future offer additional Bonds in other jurisdictions outside Puerto Rico ("Non-PR Bonds"). If the System offers Non-PR Bonds, such Bonds would contain provisions that would prohibit their purchase by residents of Puerto Rico, including corporations or other business organizations organized under the laws of Puerto Rico or engaged in trade or business in Puerto Rico ("Puerto Rico Residents"). In the event any Non-PR Bond were to be held by a Puerto Rico Resident, the System would have the right to require such Puerto Rico Resident to return any interest received by such Puerto Rico Resident on account of such Non-PR Bond.

#### Bonds are limited, non-recourse obligations of the System

The Bonds are limited, non-recourse obligations of the System, payable solely from and secured solely by a pledge of Employer Contributions made after January 31, 2008, which was the date of issuance of the first series of Bonds, and from funds held on deposit with the Fiscal Agent mentioned below. The Bonds are not payable from contributions made to the System by participating employees, or from the assets acquired with the proceeds of the Bonds, or from Employer Contributions released by the Fiscal Agent to the System after funding of required reserves, or from any other assets of the System. The Bonds are not a debt of the Commonwealth of Puerto Rico or any of its other political subdivisions or instrumentalities.

# **Government Employers contributing to the System**

A total of 210 Government Employers currently make Employer Contributions to the System. These can be divided generally into three categories: agencies and departments of the central government, public corporations, and municipalities. The table below shows the number of Government Employers within each category, the number of participating employees, and the aggregate amount of Employer Contributions for each such category for the fiscal year ended June 30, 2007. Employer Contributions exclude approximately \$69 million paid by Government Employers in connection with early retirement programs implemented during fiscal year 2007.

<u>Classification</u>	Government* <u>Employers</u>	Participating* <u>Employees</u>	Total Employer Contributions For Fiscal Year 2007
Central Government (1)	84	92,802	\$186,015,082
Public Corporations <sup>(2)</sup>	48	47,839	133,143,747
Municipalities	<u>78</u>	36,196	<u>55,235,260</u>
Total	210	176,837	\$374,394,089

Source: Employees Retirement System

See Appendix I to this Official Statement for a list of the 44 Government Employers with the highest level of covered payroll, which accounted for 80% of total Employer Contributions in fiscal year 2007, their respective number of participating employees, covered payroll, average salary, and share of Employer Contribution for such fiscal year.

Government Employers are funded from several sources: Commonwealth income and other taxes deposited in the Commonwealth's General Fund, funds provided by the Federal government, internally generated funds (in the case of public corporations) and other sources.

In fiscal year 2007, the top 10 Government Employers, in terms of covered payroll, accounted for approximately 53% of all Employer Contributions.

# **Employer Contributions**

The Act currently requires Government Employers to contribute to the System at least 9.275% of their covered payroll. (The Act provides that any difference between this minimum contribution and the amount required to maintain the System fully funded on an actuarial basis also constitutes an obligation of the Government Employers.) For purposes of the Act, covered payroll includes the payroll of all employees of a Government Employer other than its irregular and transitory employees, and other than the employees who are covered by one of the Commonwealth's other retirement systems. The Puerto Rico Treasury Department makes these contributions on behalf of the agencies and departments of the central government and certain public corporations at about the same time payroll checks are processed, currently monthly or twice a month. The remaining public corporations and the municipalities pay their Employer Contributions to the System directly, also at about the same time payroll checks are processed, currently twice a month.

<sup>(\*)</sup> As of June 30, 2007.

<sup>(1)</sup> Excludes the Police Department

<sup>(2)</sup> Includes the Police Department, which is an agency of the central government, because the department makes its Employer Contributions directly, rather than through the Puerto Rico Treasury Department.

The System normally receives approximately 95% of Employer Contributions within 15 days of the date due and in excess of 98% of Employer Contributions within the year the contribution is due. The Act grants the System the authority to compel payments from Government Employers and provides that failure to remit the Employer Contributions on time constitutes a misdemeanor. Over the past two years, six Government Employers (four municipalities and two public corporations) have consistently failed to make their Employer Contributions to the System in a timely manner. For the fiscal year ended June 30, 2007, these six Government Employers' aggregate unpaid obligations totaled approximately \$5.5 million, or 1.5% of all Employer Contributions due. The System continues to pursue the collection of outstanding amounts and to ensure that future payments are made in a timely manner.

Employer Contributions received by the System will be deposited by the System with the Fiscal Agent once a month on the last Business Day of the month.

# Projections and assumptions with respect to future Employer Contributions

The projected level of annual Employer Contributions presented in this Official Statement is based on a model prepared by Global Insight (USA), Inc. ("Global Insight"), which both the System and Global Insight believe to be based on reasonable assumptions. Global Insight's model, the assumptions on which the model is based, and certain alternative scenarios considered in the Global Insight report, are discussed under "Projections with Respect to Covered Payroll and Principal Underlying Assumptions." Global Insight's full report is included as Appendix IV. The debt service coverage projections presented in this Official Statement are based on Global Insight's baseline scenario, which projects that annual covered payroll will reach \$39.5 billion by 2059 from its 2007 level of \$4.0 billion. The Global Insight report also discusses alternative less likely scenarios, under which annual covered payroll could be as low as \$32.0 billion or as high as \$63.7 billion by 2059. These projections may not materialize. If actual annual covered payroll is materially lower than projected, the System may not have sufficient funds to pay the full amount due with respect to the Bonds.

# **Authorizing Resolution**

The Series C Bonds will be issued pursuant to a general resolution (the "General Resolution"), adopted by the Board of Trustees of the System on January 24, 2008, and a supplemental resolution (the "Supplemental Resolution" and together with the General Resolution, the "Resolution"), adopted by the Board of Trustees of the System on June 26, 2008.

The Bank of New York will act as fiscal agent under the Resolution (the "Fiscal Agent"). Copies of the General Resolution and the Supplemental Resolution are set forth in Appendices V and VI, respectively.

# Absence of public market

Since the Series C Bonds are a new issue of securities, there is currently no secondary market for the Series C Bonds, and there can be no assurance that a secondary market will develop, or if it does develop, that it will provide holders of the Bonds ("Bondholders") with liquidity for their investment or that it will continue for the life of the Series C Bonds.

# **Ratings**

The Series C Bonds have received a rating of "Baa3" on the U.S. Municipal Scale and "A1" on the Global Scale from Moody's Investors Services Inc. ("Moody's"), a U.S. public finance rating of "BBB-" from Standard & Poor's Rating Services, and a U.S. public finance rating of "BBB-" from Fitch

Ratings Services ("Fitch"). According to Moody's, its municipal ratings measure the intrinsic ability and willingness of an entity to pay its debt service. Moody's global scale ratings, on the other hand, measure "expected loss," defined as the probability of default times the amount of the loss upon default. Fitch's ratings on U.S. public finance debt securities measure credit quality relative to other U.S. public finance debt securities. According to Fitch, loss rates of most Fitch-rated U.S. public finance debt securities have historically been significantly lower, and are expected to continue to be significantly lower, than other debt instruments rated comparably by Fitch on its international ratings scale. See "Ratings."

### **Additional Bonds**

The System may issue additional series of Bonds under the Resolution subject to compliance with projected debt service coverage tests and certain other conditions. The System may also issue refunding Bonds to achieve debt service savings without complying with these coverage tests.

# Tax consequences

In the opinion of Fiddler González & Rodríguez, PSC, bond counsel, interest on the Series C Bonds is not excludable from the gross income of recipients thereof under Section 103(a) of the United States Internal Revenue Code of 1986, as amended (the "Code"). Interest on the Series C Bonds is exempt from Puerto Rico income and property taxes. For a more detailed description of the United States and Puerto Rico tax considerations relating to the Series C Bonds, see "Tax Matters" beginning on page 46. Bond counsel will not opine as to the tax consequences of ownership or disposition of the Series C Bonds under the laws of any other jurisdiction, and purchasers of the Series C Bonds should consult their tax advisors as to such tax consequences.

#### **ERISA Considerations**

The Employees Retirement Income Security Act of 1974, as amended ("ERISA"), and Section 4975 of the Code generally prohibit certain transactions between an "employee benefit plan" as defined in and subject to ERISA, a "plan" (such as a tax-qualified retirement plan or an individual retirement account or an individual retirement annuity) as defined in and subject to Section 4975(e)(1) of the Code, certain entities deemed to be holding the assets of such an "employee benefit plan" or "plan" (collectively, "Plans") and persons who, with respect to a Plan, are fiduciaries or other "parties in interest" within the meaning of ERISA or "disqualified persons" within the meaning of the Code. All fiduciaries of Plans, in consultation with their advisors, should carefully consider the impact of ERISA and the Code on an investment in any Series C Bonds.

#### **Investment Considerations**

See "Investment Considerations" beginning on page 22 for a discussion of certain factors that should be considered by prospective purchasers in evaluating an investment in the Series C Bonds.

#### PLAN OF FINANCING

One of the principal fiscal challenges that the Commonwealth has faced in recent decades is the funding of its public employee retirement systems. The System is the largest of the Commonwealth's five public employee retirement systems with 276,688 participating employees, retirees and beneficiaries as of June 30, 2007. The System had \$2.328 billion in net assets available for plan benefits and an accrued actuarial liability of \$12.284 billion, resulting in an unfunded accrued actuarial liability of \$9.956 billion as of June 30, 2005, the latest date as of which an actuarial report for the System exists, and a funding ratio of 19%.

As the number of retirees and the costs of retirement benefits have increased, the unfunded accrued actuarial liability of the Commonwealth's retirement systems has increased. From fiscal year 1991 to fiscal year 2005, the unfunded accrued actuarial liability increased from \$3.568 billion to \$9.956 billion. In order to reduce the growth of its pension liability, the Commonwealth closed the System's defined benefit plan to new participants, effective on December 31, 1999. Government employees that became participants of the System after this date participate only in a defined contribution plan that is funded solely by employee contributions. Although Government Employers are required to continue to make Employer Contributions with respect to all participating employees, whether these employees participate in the defined benefit plan or in the defined contribution plan, all Employer Contributions are used to fund benefits provided to beneficiaries of the defined benefit plan. The System's benefit disbursements during fiscal years 2003 to 2007 exceeded the sum of contributions and investment income for those years.

The System performs an actuarial valuation every two years. Set forth below is a schedule showing the unfunded accrued actuarial liability of the System for the fiscal years ended June 30, 2001, 2003 and 2005. The 2007 actuarial valuation has not been finalized. The System expects the 2007 actuarial valuation to be finalized on or about August 2008. The System's current estimate projects that the 2007 accrued actuarial liability could range from \$14.3 billion to \$14.7 billion, resulting in an unfunded actuarial liability of approximately \$11.4 billion to \$11.8 billion.

(\$ millions)	2001	2003	2005
Unfunded Accrued Actuarial Liability	\$7,453	\$9,244	\$9,956

Source: Employees Retirement System, Actuarial Valuation Reports 2001, 2003 and 2005.

The System has authorized the issuance of Bonds from time to time to increase the funds currently available to pay benefits under the closed defined benefit plan, and to reduce the unfunded accrued actuarial pension liability of the System under this defined benefit plan. In order to achieve this, the System plans to issue Bonds from time to time in one or more series and add the net proceeds from the sale of such Bonds to the funds that are currently being invested for the benefit of the participating employees. Because the Bonds are not payable from or secured by these invested assets, the System's unfunded actuarial accrued liability will be reduced by the full amount of the net proceeds of the Bonds. By increasing the funds currently available to pay benefits under this closed defined benefit plan, the System anticipates that it will be able to fund benefit payments for a longer period than its existing assets would allow it to do without an increase in the percentage of payroll that Government Employers are required to contribute to the System.

The net yield of the System's assets may increase or decrease over time regardless of this transaction, but could decrease as a result of the issuance of Bonds in the event that the System is unable to invest the proceeds of the Bonds at yields that equal or exceed the interest rate on the Bonds. Although

this may reduce the amount of funds available to the System to pay retirement benefits, it will not directly affect the pledge of Employer Contributions to the holders of the Bonds.

# Restrictions on purchase of Non-PR Bonds by Puerto Rico Residents

The Series C Bonds will be offered exclusively in Puerto Rico. The System may in the future offer Bonds in other jurisdictions outside Puerto Rico ("Non-PR Bonds"). Non-PR Bonds may not be purchased under any circumstances by residents of Puerto Rico, including corporations or other business organizations organized under the laws of Puerto Rico or engaged in trade or business in Puerto Rico ("Puerto Rico Residents"). In the event any Non-PR Bond is held by a Puerto Rico Resident, the System shall have the right to require such Puerto Rico Resident to return any interest received by such Puerto Rico Resident on account of such Non-PR Bond.

#### THE SYSTEM

#### General

The System is a trust created by the Legislature of Puerto Rico in 1951 pursuant to the Act to provide retirement and disability annuities, death benefits, and loans to Puerto Rico's public employees. Persons eligible to become members of the System (the "Members") include: (i) all persons holding regular employment positions in any executive department, agency, administration, board, commission, committee, office or instrumentality of the Executive Branch of the Government of the Commonwealth; (ii) all members and regular employees of the Legislative Branch of the Government of the Commonwealth; (iii) all officers and regular employees of the municipalities of the Commonwealth; and (iv) all officers and regular employees of most public corporations. As of June 30, 2007, the System had 276,688 Members, 99,851 of which were retirees and beneficiaries currently receiving benefits and 176,837 of which were current active participating employees.

The System administers two separate retirement plans: a defined benefit plan and a defined contribution plan. In the defined benefit plan, participants are entitled to retirement benefits which are defined and determinable. Members who entered the System on or before December 31, 1999 participate in the defined benefit plan. The purpose of this financing is to increase funds available to pay beneficiaries of the defined benefit plan. The defined contribution plan, on the other hand, is a retirement plan that provides for an individual account for each participant of the plan and for benefits based solely upon the amounts contributed to such participant account. Members who entered the System on or after January 1, 2000 participate in the defined contribution plan.

As of June 30, 2007, the System had total assets of \$2.931 billion, total liabilities (not including actuarial liabilities) of \$40 million, and net assets held in trust for pension benefits of \$2.891 billion. For the fiscal year ended June 30, 2007, the System's net assets held in trust for pension benefits increased by approximately \$350 million. This includes the net effect of employer, employee and special contributions of \$799 million, net investment income of \$434 million, benefits paid of \$832 million, and administrative expenses of \$29 million.

The System has the authority to transact all of its business, invest its funds and hold its securities and other properties in its own name. The Act authorizes the System to borrow money, including through the direct placement of debt, and secure any such borrowing with its assets.

#### Governance

Control of the governance and operation of the System is vested in the Board of Trustees (the "Board"), which sets policy and oversees the operations consistent with applicable laws. The members of the Board include the Puerto Rico Secretary of the Treasury (or his appointee), the President of Government Development Bank for Puerto Rico (or his appointee), the Commissioner of Municipal Affairs (or his appointee) and the Director of the Office of Human Resources of the Government of Puerto Rico (or his appointee), as *ex officio* members, and three Members appointed to three year terms by the Governor of Puerto Rico, two of whom must be Members of the System or the Judiciary Retirement System, with at least ten years of credited service. The other member is a pensioner of the System or the Judiciary Retirement System. The Board is also responsible for appointing the Administrator of the System (the "Administrator").

The Board currently consists of the following members:

<u>Name</u>	<u>Term Expires</u>	<u>Occupation</u>
Jorge Irizarry Herrans (Chairman)	Ex-officio	President, Government Development Bank for Puerto Rico
Angel Castillo Rodríguez (Vice Chairman)	Ex-officio	Commissioner of Municipal Affairs of Puerto Rico
Rosa Castro Sierra (Secretary)	September 8, 2009	Executive Assistant to the Secretary for Management and Development of the Housing Development and Improvement Administration of Puerto Rico
Angel Ortíz García	Ex-officio	Acting Secretary of the Treasury of Puerto Rico
Marta Vera Ramírez	Ex-officio	Director, Office of Human Resources of the Commonwealth of Puerto Rico
Roberto Aquino García	August 1, 2008	Chairman of the Board, Puerto Rico Retirees Association
Roberto Santiago Cancel	October 1, 2008	Auxiliary Inspector, Inspector for Cooperatives of Puerto Rico

#### Management

Minia González-Alvarez is the Acting Administrator of the System. Ms. González was appointed by the Board as Acting Administrator on January 31, 2008, effective February 1, 2008. Prior to her appointment, Ms. González was Acting General Counsel, Senior Vice President and Compliance Director of Government Development Bank for Puerto Rico ("Government Development Bank") from 2001 through January 31, 2008. Ms. González was also Assistant Executive Director of Puerto Rico Industrial, Tourist, Educational, Medical and Environmental Control Facilities Financing Authority from 2001 through January 31, 2008.

Ms. González received a Bachelor's degree in Business Administration from the University of Puerto Rico and a law degree from the Inter American University. Ms. Gonzalez's experience in the public sector also includes tenures at Puerto Rico Housing Finance Corporation, a subsidiary of

Government Development Bank, where she served in various positions since 1988, including the position of Executive Director, and as legal counsel at the Puerto Rico Department of Housing.

As Acting Administrator, Ms. González is responsible for the daily operations of the System. Among her duties are adopting actuarial guidelines for the operation of the System, compiling statistical data to perform periodical actuarial valuations and making recommendations to the Board as to the investment of the System's assets.

Other principal officers of the System include the following:

Roberto Rivera Cruz is the Deputy Administrator of the System. Mr. Rivera was appointed to this position in March 2008. Mr. Rivera also served as the Deputy Administrator of the System from September 2002 through June 2006. Prior to his tenures at the System, Mr. Rivera served as Executive Assistant Manager of the Employment and Training Enterprises Corporation (2001-2002), Budget Director of the Carolina Municipality (1995-2001) and Assistant to the Department of Consumer Affairs. Mr. Rivera has also worked in the private industry. From 1994 through 1995, Mr. Rivera worked as Financial Comptroller of Ital-Americas Food Corp. Mr. Rivera received a Bachelor's degree in Arts with a major in Economics and Accounting and a Master's degree in Arts with a major in Economics from the University of Puerto Rico, Río Piedras Campus.

José Luis Villafañe is one of two Auxiliary Administrators of the System. Mr. Villafañe was appointed to this position in July 2006. Prior to his appointment as Auxiliary Administrator, Mr. Villafañe served as the System's Comptroller from September 2005 through June 2006. He also served as the Operational Auditing Manager of the Office of Management and Budget of the Commonwealth of Puerto Rico (2005) and as Internal Audit Director and Director of the Office of the Comptroller and Ethics Affairs of the Puerto Rico Department of Education (2001-2005). Mr. Villafañe received a Bachelor's degree as well as a Master's degree in Business Administration with a major in accounting from the Metropolitan University, San Juan campus.

Lydia V. Santiago is an Auxiliary Administrator of the System. Ms. Santiago was appointed to this position in July 2005. Prior to her appointment as Auxiliary Administrator, Ms. Santiago worked as an advisor to the Puerto Rico Senate. Ms. Santiago served as a legislative advisor in 2000, and from 2001 through 2005 worked as an advisor to Senator Antonio Fas Alzamora, former President of the Puerto Rico Senate (2000-2004). Ms. Santiago received a Juris Doctor degree from the School of Law of the Catholic University in Ponce.

Luis I. García López is the Chief Investment Officer and Director of Actuarial Studies and Investments of the System. Mr. García was appointed to this position in November 2007. Prior to his appointment, Mr. García worked as special assistant to the System's Administrator in actuarial and investment matters. Mr. García, who has over 15 years of experience in the financial industry, has also worked as a trust officer for Banco Popular de Puerto Rico, investment consultant for Wilshire and Associates and portfolio manager for several insurance companies in Puerto Rico and abroad. Mr. García received a Bachelor's degree in Business Administration with a major in finance and a minor in economics from the University of Puerto Rico, Mayagüez Campus.

Marilyn Cuevas Silvagnoli, Esq. is the Director of Legal Affairs of the System. Ms. Cuevas was appointed to this position in December 2002. Prior to this appointment, Ms. Cuevas served in various public positions, including as a Special Assistant to the Administrator. Her experience in the public sector includes tenures at the Puerto Rico Justice Department (1980-1985); the Puerto Rico Tourism Company (1985-1986; 1989-1993); the Personnel Administration System, where Ms. Cuevas served two

terms as Examination Officer II (from 1986 through 1989 and from 1993 through 2001); and the Puerto Rico Appellate Court (1993), where she served as a clerk. Ms. Cuevas received a Juris Doctor degree from the School of Law of the Interamerican University of Puerto Rico. She is admitted to practice in local and federal courts in the Commonwealth.

The administrative offices of the System are located at 437 Ponce de Leon Ave., 15<sup>th</sup> Floor, Hato Rey, Puerto Rico 00918.

# Other post-employment benefits

Commencing with fiscal year 2008, which began on July 1, 2007, the Commonwealth will be required, pursuant to Government Accounting Standards Board ("GASB") Statement Number 45, to calculate and record for financial accounting purposes the cost of non-pension post-retirement benefits provided to former government employees using actuarial principles, in substantially the same way that it calculates and records pension benefits provided to such employees. These benefits currently include, per employee, an annual \$100 reimbursement to cover pharmaceutical costs, a \$100 per month reimbursement to cover medical insurance premiums, an annual Christmas bonus of \$600, a bonus of \$100 payable each July, and various death and disability benefits for certain employees of the Police Department, the Firefighters Corp, the Administration of Correctional Facilities, the Puerto Rico National Guard and the Treasury Department. Currently, the Commonwealth records these costs on a cash basis. Although this required calculation will not have a cash impact on the Commonwealth beyond what it currently pays, it will be reflected in the financial statements of the Commonwealth and may highlight the long term costs of providing these benefits.

#### **Financial Statements**

The audited financial statements of the System for the fiscal year ended June 30, 2007 are included as Appendix II. Certain additional information relating to the System is included in Appendix III.

# OTHER COMMONWEALTH PENSION SYSTEMS

In addition to the System, the Commonwealth has four other public employee retirement systems: (i) the retirement system of the Electric Power Authority, which is funded by that public corporation from its revenues, (ii) the University of Puerto Rico's retirement system, which is funded by that public corporation from its revenues (a significant portion of which come from the central government), (iii) the Judiciary Retirement System, which is administered by the System and is funded by the central government, and (iv) the Teachers Retirement System, which is also funded by the central government. The most significant of these in terms of number of participants and funding ratio is the Teachers Retirement System, with 77,500 participants, and an unfunded accrued actuarial liability of \$4.59 billion as of June 30, 2007, and a corresponding funding ratio of 41%.

The Commonwealth Report includes tables that present the Statement of Plan Net Assets and Statement of Changes in Plan Net Assets of the System and the Judiciary Retirement System for fiscal years 2006 and 2007 and the six-month period ended December 31, 2007 and of the Teachers Retirement System for fiscal years 2005, 2006 and 2007.

#### GOVERNMENT EMPLOYERS CONTRIBUTING TO THE SYSTEM

Currently, there are 210 Government Employers that are required by the Act to contribute to the System for the benefit of their employees. These are classified by the System into three categories on the basis of whether their Employer Contributions are made by the Treasury Department or by the Government Employer itself: (i) agencies and departments of the central government (excluding the Police Department), which make their Employer Contributions through the Treasury Department, (ii) public corporations and the Police Department (an agency of the central government), which make their Employer Contributions directly, and (iii) municipalities, which also make their Employer Contributions directly. These represented 50%, 35% and 15%, respectively, of total Employer Contributions in fiscal year 2007.

The following table shows Employer Contributions, net of contributions made in connection with early retirement programs, for the five-year period ended June 30, 2007.

Entities	2002-03	2003-04	2004-05	2005-06	2006-07
Central Government*	\$148,685,232	\$162,144,517	\$189,659,899	\$190,910,430	\$186,015,082
Public Corporations*	109,536,054	114,512,908	127,349,701	135,429,468 <sup>(1)</sup>	133,143,747 <sup>(2)</sup>
Municipalities	47,056,500	48,141,754	54,906,625	56,537,016	55,235,260(3)
Total	\$305,277,786	\$324,799,179	\$371,916,225	\$382,876,914	\$374,394,089 <sup>(4)</sup>

Source: Employees Retirement System.

- (1) Excludes (i) \$15 million contributed by PRIDCO, (ii) \$284,000 contributed by the Puerto Rico Trade and Export Corporation, and (iii) \$211,242 contributed by several public corporations, in connection with the implementation of early retirement programs. For further discussion on PRIDCO's early retirement program, see pages 20 and 21 of the System's Audited Financial Statements as of and for the years ended June 30, 2007 and 2006, a copy of which has been attached hereto as Appendix II.
- (2) Excludes (i) \$18,936,295 contributed by PRIDCO in connection with an early retirement program approved and implemented during fiscal year 2006 and (ii) \$23,100,627 contributed by the Puerto Rico Tourism Company in connection with an early retirement program approved and implemented during fiscal year 2007.
- (3) Excludes \$27 million contributed by the Municipality of San Juan in connection with an early retirement program approved and implemented during fiscal year 2007.
- (4) The decrease in Employer Contributions in fiscal year 2007 from fiscal year 2006 is attributed primarily to: (i) the implementation of early retirement programs by several government instrumentalities, and (ii) a reduction in the number of participating employees of over 4,000 during the period.
- (\*) Even though the Police Department is an agency of the central government and not a public corporation, the System has historically accounted for the Employer Contributions made by the Police Department as Employer Contributions made by public corporations. This table reflects that custom and includes the Police Department with public corporations.

Participating Government Employers are funded from several sources: Commonwealth income and other taxes deposited in the Commonwealth's General Fund, funds provided by the Federal government, internally generated funds (in the case of public corporations) and other sources.

# **Government Employers with Highest Covered Payroll**

The table below shows the 10 Government Employers with the highest covered payroll as of June 30, 2007. The table sets forth (i) whether the entity is an agency or department of the central government, a public corporation, or a municipality, (ii) the total number of covered employees, (iii) the covered payroll, (iv) Employer Contributions for fiscal year 2007, and (v) the share of total Employer Contributions represented by such instrumentality.

<u>Entity</u>	<u>Classification</u>	Participating Employees	Covered Payroll (\$000)	FY 2007 Employer Contribution (\$000)	% of Total Employer Contributions
Police Department	Central Government	21,318	\$ 567,547	\$ 52,639	14.1%
Education Department <sup>(1)</sup>	Central Government	26,027	452,461	41,966	11.2
Correctional Facilities Administration	Central Government	8,678	208,876	19,373	5.2
State Insurance Fund Corporation	Public Corporation	4,129	204,904	19,315	5.2
Health Department	Central Government	7,178	177,556	16,468	4.4
Administration of Court Facilities <sup>(2)</sup>	Central Government	4,971	124,113	11,511	3.1
Municipality of San Juan	Municipality	6,326	112,036	10,431 <sup>(3)</sup>	2.8
Treasury Department	Central Government	3,606	101,201	9,386	2.5
Justice Department	Central Government	2,519	93,713	8,692	2.3
Aqueduct and Sewer Authority	Public Corporation	<u>5,413</u>	82,972	<u>7,712</u>	<u>2.1</u>
Sub-total		<u>90,165</u>	<u>\$2,125,379</u>	<u>\$197,493</u>	<u>52.8%</u>
Other Government Employers		<u>86,672</u>	<u>\$1,898,854</u>	<u>\$176,901</u>	<u>47.2%</u>
Total		<u>176,837</u>	<u>\$4,024,233</u>	<u>\$374,394</u> <sup>(4)</sup>	<u>100.0%</u>

Source: Employees Retirement System

Education Department employees who participate in the System are those who are not teachers. Teachers participate in the Teachers Retirement System.

<sup>(2)</sup> Judges are not Members of the System but of the Judiciary Retirement System.

<sup>(3)</sup> Excludes \$27 million contributed by the Municipality of San Juan in connection with an early retirement program approved and implemented during fiscal year 2007.

<sup>(4)</sup> Excludes (i) \$18.9 million contributed by PRIDCO, (ii) \$23.1 million contributed by the Puerto Rico Tourism Company, and (iii) \$27 million contributed by the Municipality of San Juan, all in connection with the implementation of early retirement programs.

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The Puerto Rico Treasury Department makes Employer Contributions on behalf of the agencies and departments of the central government, except the Police Department, and on behalf of certain public corporations. The Police Department, the remaining public corporations and the municipalities pay their Employer Contributions to the System directly.

The System normally receives approximately 95% of Employer Contributions within 15 days of the date due and in excess of 98% of Employer Contributions within the year the contribution is due. The Act grants the System the authority to compel payments from Government Employers and provides that failure to remit the Employer Contributions on time constitutes a misdemeanor. Over the past two years, six employers, four municipalities and two public corporations have consistently failed to make their Employer Contributions to the System in a timely manner. For fiscal year ending June 30, 2007, these employers' aggregate unpaid obligations totaled approximately \$5.5 million, or 1.5% of all Employer Contributions due. The System continues to pursue the collection of outstanding amounts and to ensure that future payments are made in a timely manner.

#### Puerto Rico Police Department

The Puerto Rico Police Department (the "Police Department") is the official territorial police force of the Commonwealth. As of June 30, 2007, the Police Department had 21,318 participating employees, with an average annual salary of \$29,006. As of the above date, the Police Department's average monthly contribution to the System for the benefit of its employees was approximately \$4.4 million.

#### Puerto Rico Education Department

The Puerto Rico Education Department (the "Education Department") is responsible for the administration and funding of the public school system of the Commonwealth. The Secretary of Education, a member of the Governor's cabinet, is the head of the Education Department.

As of June 30, 2007 the Education Department had 71,846 employees. Of the total headcount, 45,819 were teachers. Public school teachers do not participate in the System but rather in the Teachers Retirement System, one of the other four retirement systems that cover Puerto Rico's public employees. Only those employees of the Education Department who are not teachers, or as they are known in Spanish "empleados no docentes," are members of the System. As of the above date, the Education Department had 26,027 participating employees, with an average annual salary of \$18,250, and its average monthly contribution to the System for the benefit of its employees was approximately \$3.5 million.

#### Administration of Correctional Facilities

The Administration of Correctional Facilities of Puerto Rico (the "Administration of Correctional Facilities") regulates and oversees the operation and administration of the Commonwealth's correctional and penitentiary system.

As of June 30, 2007, the Administration of Correctional Facilities had 8,678 participating employees, with an average annual salary of \$24,916. As of the above date, the Administration of Correctional Facilities' average monthly contribution to the System for the benefit of its employees was approximately \$1.6 million.

# State Insurance Fund Corporation

The State Insurance Fund Corporation ("SIFC") is a public corporation created to administer the Workmen's Compensation Act of Puerto Rico. SIFC provides medical services to public and private employees who have suffered occupational injuries. SIFC has broad powers, including the authority to conduct all of its business, invest its funds and own real estate.

As of June 30, 2007, SIFC had 4,129 participating employees, with an average annual salary of \$50,770. As of the above date, SIFC's average monthly contribution to the System for the benefit of its employees was approximately \$1.6 million.

# Health Department

The Puerto Rico Health Department (the "Health Department") is responsible for promoting and ensuring the health and well-being of all residents of Puerto Rico. The Health Department is headed by the Secretary of Health, who is also a member of the Governor's Cabinet. Among the powers granted to the Health Department are (i) the authority to regulate all medical facilities in the Commonwealth; (ii) the administration and operation of public health facilities, including the Commonwealth's biggest medical facility, the Medical Center in San Juan; (iii) the administration of financial and nutritional assistance programs; and (iv) the funding and administration of the public health insurance system.

As of June 30, 2007, the Health Department had 7,178 participating employees, with an average annual salary of \$25,963. As of the above date, the Health Department's average monthly contribution to the System for the benefit of its employees was approximately \$1.4 million.

# Administration of Court Facilities

The Office of Administration of Court Facilities (the "Administration of Court Facilities") is a governmental entity that assists the Chief Justice of the Puerto Rico Supreme Court in the administration of the Judicial System of the Commonwealth. The Commonwealth's Constitution grants the Chief Justice of the Supreme Court of Puerto Rico authority over the Judicial System of the Commonwealth. In order to carry out his responsibilities, the Chief Justice may delegate some of his powers to the Executive Director of the Administration of Court Facilities. The Executive Director of the Administration of Court Facilities is responsible for the daily operations of the Judicial System.

As of June 30, 2007, the Administration of Court Facilities had 4,971 participating employees, with an average annual salary of \$26,650. Of the total headcount, 374 were judges. Judges do not participate in the System. As of the above date, the Administration of Court Facilities' average monthly contribution to the System for the benefit of its employees was approximately \$959,000.

# Municipality of San Juan

The Municipality of San Juan ("San Juan") is the capital of the Commonwealth and the most populous of the 78 municipalities. San Juan is the economic center of the Commonwealth. Most major local banks' headquarters, as well as many hotels, are located at San Juan.

As of June 30, 2007, San Juan had 6,326 participating employees, with an average annual salary of \$20,513. As of the above date, San Juan's average monthly contribution to the System for the benefit of its employees was approximately \$869,000.

# Department of Treasury

The Puerto Rico Treasury Department (the "Treasury Department") is the governmental entity responsible for the Commonwealth's financial and fiscal matters. The Secretary of the Treasury, who is also a member of the Governor's cabinet, is the head of the Treasury Department. Along with other governmental entities, the Treasury Department actively participates in the implementation of the Commonwealth's financial and economic policies. Within the powers granted to the Treasury Department is the power to collect taxes and enforce tax laws. Pursuant to the Act, the Treasury Department is the fiscal agent of the System.

As of June 30, 2007, the Treasury Department had 3,606 participating employees, with an average annual salary of \$29,364. As of the above date, the Treasury Department's average monthly contribution to the System for the benefit of its employees was approximately \$782,000.

# Justice Department

The Puerto Rico Justice Department (the "Justice Department") is the governmental entity responsible for enforcing the laws of the Commonwealth. The Secretary of Justice, who is also a member of the Governor's cabinet, is the head of the Justice Department. The Secretary oversees the work of all district attorneys across the Commonwealth. The Justice Department is also responsible for defending the interests of the Commonwealth in courts of law.

As of June 30, 2007, the Justice Department had 2,519 participating employees, with an average annual salary of \$38,927. As of the above date, the Justice Department's average monthly contribution to the System for the benefit of its employees was \$724,000.

# Puerto Rico Aqueduct and Sewer Authority

The Puerto Rico Aqueduct and Sewer Authority ("PRASA") owns and operates the Commonwealth's public water supply and sanitary sewer systems. Similar to other Commonwealth public corporations, PRASA has broad powers, including the authority to invest its funds and own real estate.

As of June 30, 2007, PRASA had 5,413 participating employees, with an average annual salary of \$19,425. As of the above date, PRASA's average monthly contribution to the System for the benefit of its employees was approximately \$642,000.

The following table shows the number of participating employees of each of the 10 major contributors to the System for the five-year period ended June 30, 2007:

	Participating Employees							
Entity	Classification	2003	2004	2005	2006	2007		
Puerto Rico Police Department	Central Govt	19,786	18,562	20,584	20,145	21,318		
Puerto Rico Education Department	Central Govt	24,872	25,538	27,086	26,407	26,027		
Correctional Facilities Administration	Central Govt	9,071	8,820	9,456	9,211	8,678		
State Insurance Fund Corporation	Public Corp	3,763	3,758	4,056	4,010	4,129		
Administration of Court Facilities	Central Govt	4,520	4,377	4,629	4,768	4,971		
Health Department	Central Govt	5,745	5,927	6,364	6,974	7,178		
Municipality of San Juan	Municipality	6,042	6,817	6,649	6,525	6,326		
Treasury Department	Central Govt	3,555	3,389	3,775	3,582	3,606		
Justice Department	Central Govt	2,544	2,344	2,451	2,440	2,519		
Aqueduct and Sewer Authority Source: Employees Retirement System	Public Corp	5,238	5,309	5,181	5,352	5,413		

# CONSOLIDATED RESOURCES OF THE COMMONWEALTH AND ITS INSTRUMENTALITIES

The Government of the Commonwealth of Puerto Rico relies on various sources of funds for financing its various agencies and public corporations. These sources of funds are: the General Fund, special state funds, income from services, loans and bond issues, federal contributions and other revenues (restricted funds or extraordinary income).

The consolidated resources of the Commonwealth for fiscal year 2008 are estimated at approximately \$27 billion. The most significant sources of funds are: General Fund (34% of consolidated resources), income from services (30%), and federal contributions (20%).

The following table sets forth the consolidated resources available to the government of Puerto Rico and its public corporations (not all of which are Government Employers that contribute to the System) from all these sources for the three fiscal years that ended on June 30, 2007, and the projected amount of such resources for the fiscal year ending June 30, 2008.

Consolidated Budgeted Revenues by Source (\$ millions)							
	<u>2005</u>	<u>2006</u>	<u>2007</u>	<b>2008E</b>			
General Fund	\$ 9,311	\$ 9,596	\$ 9,224	\$ 9,227			
Special Funds	482	499	519	499			
Federal Funds	4,774	5,093	4,950	5,447			
Income from Services	7,005	7,588	7,593	7,963			
Other Revenues	1,448	902	1,225	1,436			
Loan and Bonds	2,792	2,840	2,961	2,302			
Total	\$25,812	\$26,518	\$26,472	\$26,874			

Source: Office of Management and Budget of the Commonwealth of Puerto Rico

E: Original estimate provided by the Office of Management and Budget.

See "Recent Developments Relating to the Commonwealth of Puerto Rico" for an updated estimate of revenues.

The uses of funds for the consolidated resources include payment of payroll and related costs, debt service payments, and capital improvements, among others. The estimated payroll and related costs are \$8.45 billion or 31% of the consolidated revenue sources projected for fiscal year 2008.

#### **USE OF PROCEEDS**

The net proceeds from the sale of the Series C Bonds, after deducting underwriting commissions and offering expenses and funding reserves, will be added to the System's pool of invested assets, which will be used to pay retirement benefits to the beneficiaries of the System's defined benefit plan. The following table sets forth the estimated sources and uses of bond proceeds:

#### **Sources:**

Initial Principal Amount of the Series C Bonds Total Sources	\$300,202,930.00
Total Sources	\$300,202,930.00
Uses:	
Transfer to System to fund retirement benefits	\$285,037,106.65
Deposit into Senior Bond Debt Service Reserve Account	9,148,607.98
Underwriting discount and cost of issuance	6,017,215.37
Total Uses	\$300,202,930.00

#### PROJECTED DEBT SERVICE COVERAGE

The table labeled "Projected Debt Service Coverage of Series C Bonds" below sets forth, for each Bond Year until the last maturity of the Series C Bonds, (i) the projected Employer Contributions calculated on the basis of Global Insight's baseline scenario, (ii) the total debt service requirements for the outstanding Bonds (currently the Series A Bonds and the Series B Bonds), (iii) the principal and interest requirements for the Series C Bonds, (iv) the total debt service for the outstanding Bonds and the Series C Bonds, and (v) the projected debt service coverage ratio for the outstanding Bonds and the Series C Bonds, which is the ratio of projected Employer Contributions to principal and interest requirements for each such Bond Year. A "Bond Year" is the period from July 2 to July 1 of the following calendar year.

The System may issue additional Senior Bonds payable from Employer Contributions, provided that the projected debt service coverage ratio for all Senior Bonds payable from Employer Contributions (including the Bonds proposed to be issued) is equal to or greater than 140% in each Bond Year. The System may also issue additional Subordinated Bonds payable from Employer Contributions, provided that the projected debt service coverage ratio for all Bonds payable from Employer Contributions (including the Bonds proposed to be issued) is equal to or greater than 125% in each Bond Year.

The table below does not take into consideration any additional Bonds that may be issued by the System. If market conditions are favorable, the System anticipates issuing additional Senior Bonds during calendar year 2008.

# **Projected Debt Service Coverage of Series C Bonds**

		Debt Service for all	Debt Se	rvice for		Projected
Bond	Projected Employer	outstanding		s C Bonds	Total Debt	Debt Service
<u>Year</u>	<b>Contribution</b>	Bonds	<u>Principal</u>	<u>Interest</u>	<u>Service</u>	Coverage Ratio
2008	\$ 377,473,118	\$ 44,282,110	-	-	\$ 44,282,110	8.52x
2009	375,483,438	147,932,490	-	\$18,638,129	166,570,619	2.25x
2010	394,815,892	147,932,490	-	18,586,500	166,518,990	2.37x
2011	417,794,500	147,932,490	-	18,586,500	166,518,990	2.51x
2012	443,570,389	147,932,490	-	18,586,500	166,518,990	2.66x
2013	470,805,968	147,932,490	-	18,586,500	166,518,990	2.83x
2014	502,270,429	147,932,490	-	18,586,500	166,518,990	3.02x
2015	533,805,265	147,932,490	-	18,586,500	166,518,990	3.21x
2016	564,731,307	147,932,490	-	18,586,500	166,518,990	3.39x
2017	597,186,308	147,932,490	-	18,586,500	166,518,990	3.59x
2018	631,541,758	147,932,490	-	18,586,500	166,518,990	3.79x
2019	667,518,521	147,932,490	-	18,586,500	166,518,990	4.01x
2020	705,555,478	147,932,490	-	18,586,500	166,518,990	4.24x
2021	745,294,753	197,932,490	-	18,586,500	216,518,990	3.44x
2022	786,458,844	215,007,490	-	18,586,500	233,593,990	3.37x
2023	829,190,425	220,912,490	-	18,586,500	239,498,990	3.46x
2024	873,053,308	136,232,490	\$18,700,000	18,586,500	173,518,990	5.03x
2025	918,329,886	136,232,490	22,000,000	17,436,450	175,668,940	5.23x
2026	965,050,463	136,232,490	29,150,000	16,083,450	181,465,940	5.32x
2027	1,013,838,531	136,232,490	36,300,000	14,290,725	186,823,215	5.43x
2028	1,063,207,381	413,482,490	3,850,000	12,058,275	429,390,765	2.48x
2029	1,114,573,728	415,637,490	100,000	11,821,500	427,558,990	2.61x
2030	1,167,577,737	268,857,490	2,742,930	18,612,320	290,212,740	4.02x
2031	1,222,085,765	364,547,490	100,000	11,781,500	376,428,990	3.25x
2032	1,277,929,604	248,529,240	3,420,000	11,775,250	263,724,490	4.85x
2033	1,335,662,274	255,317,490	4,320,000	11,561,500	271,198,990	4.93x
2034	1,394,500,771	400,286,490	100,000	11,291,500	411,677,990	3.39x
2035	1,455,661,008	253,496,240	11,940,000	11,285,250	276,721,490	5.26x
2036	1,518,095,961	312,785,990	2,160,000	10,539,000	325,484,990	4.66x
2037	1,582,243,455	300,323,240	7,920,000	10,404,000	318,647,240	4.97x
2038	1,647,945,838	287,860,490	14,400,000	9,909,000	312,169,490	5.28x
2039	1,715,825,021	309,817,740	28,600,000	9,009,000	347,426,740	4.94x
2040	1,786,450,339	149,484,200	28,600,000	7,207,200	185,291,400	9.64x
2041	1,859,554,456	91,719,700	28,600,000	5,405,400	125,725,100	14.79x
2042	1,935,173,602	89,391,600	28,600,000	3,603,600	121,595,200	15.92x
2043	2,013,323,675	49,513,500	28,600,000	1,801,800	79,915,300	25.19x
2044	2,094,137,802	49,513,500	-	-	49,513,500	42.29x
2045	2,177,653,758	49,513,500	-	-	49,513,500	43.98x
2046	2,263,902,850	49,513,500	-	-	49,513,500	45.72x
2047	2,353,018,333	49,513,500	-	-	49,513,500	47.52x
2048	2,444,940,053	49,513,500	-	-	49,513,500	49.38x
2049	2,539,879,155	49,513,500	-	-	49,513,500	51.30x
2050	2,637,775,323	49,513,500	-	-	49,513,500	53.27x

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Bond	Projected Employer	Debt Service for all outstanding	Debt Service for the Series C Bonds Total		Total Debt	Projected Debt Service
<u>Year</u>	<u>Contribution</u>	Bonds	<u>Principal</u>	Interest	<u>Service</u>	Coverage Ratio
2051	2,738,773,514	49,513,500	-	-	49,513,500	55.31x
2052	2,842,926,433	49,513,500	-	-	49,513,500	57.42x
2053	2,950,235,182	49,513,500	-	-	49,513,500	59.58x
2054	3,060,837,860	49,513,500	-	-	49,513,500	61.82x
2055	3,174,702,827	232,713,500	-	-	232,713,500	13.64x
2056	3,291,988,111	217,200,850	-	-	217,200,850	15.16x
2057	3,412,779,476	203,020,400	-	-	203,020,400	16.81x
2058	3,536,943,940	235,501,200	-	-	235,501,200	15.02x

The projected Employer Contributions set forth above are based on a model prepared by the System's consultant, Global Insight, which is set forth in Appendix IV, and which projects the total covered payroll of Government Employers through 2059. The principal assumptions and economic variables on which the model is based are described below under "Projections with Respect to Covered Payroll and Principal Underlying Assumptions." Although the System believes that these assumptions are reasonable, the System cannot guarantee that Employer Contributions will in fact be as projected. Prospective purchasers of the Series C Bonds should read the report in its entirety.

If future Employer Contributions are less than projected by an amount greater than the margin provided by the projected debt service coverage ratio at the time of issuance of any Bonds, the System will not receive sufficient funds to pay debt service on the Bonds. Employer Contributions could be less than projected for several reasons, the most significant of which are discussed under "Investment Considerations" below.

# PROJECTIONS WITH RESPECT TO COVERED PAYROLL AND PRINCIPAL UNDERLYING ASSUMPTIONS

The projected level of Employer Contributions that is used in the debt service coverage projections for the Bonds set forth in the preceding section is based on a model prepared by the System's consultant, Global Insight. Both the System and Global Insight believe that the model is based on reasonable assumptions. The complete text of the Global Insight report is set forth in Appendix IV, and should be read in its entirety.

Global Insight is an economic forecasting firm formed in 2001 through the combination of two firms: Data Resources, Inc. (founded in 1968) and Wharton Econometric Forecasting Associates (founded in 1963). Global Insight has over 3,800 clients in industry, finance, and government, revenues in excess of \$95 million, 600 employees, and 23 offices in 13 countries covering North and South America, Europe, Africa, the Middle East, and Asia. Some of the data used by Global Insight to prepare this model, specifically information on the Commonwealth's main retirement systems and on its government structure, was provided by a Puerto Rico consulting firm.

The Global Insight model, together with Global Insight's long term forecast of Puerto Rico's economy, projects the total number of government employees that will participate in the System (referred to in the model as total employment in the "ERS participating sector") and their average wages from fiscal year 2008 through fiscal year 2059, and consequently projects the total covered payroll of such employees (which is equal to the total number of employees multiplied by their average wage). By

multiplying total covered payroll by the current contribution rate of 9.275%, the System can then project total Employer Contributions.

# Global Insight's baseline scenario

Global Insight's baseline scenario projects that between fiscal years 2007 and 2059 the average annual growth rate of the covered payroll will be approximately 4.5%, increasing from its current level of \$4.0 billion in 2007 to \$7.6 billion in 2020, \$19.3 billion in 2040, and \$39.5 billion in 2059.

Global Insight's model uses four explanatory variables that Global Insight found to be effective in predicting total employment and average wages in the ERS participating sector, which are then used to calculate total covered payroll. These four variables are total government employment and real gross national product, which are used to predict total employment in the ERS participating sector, and labor productivity and the unemployment rate, which are used to predict average wages in the ERS participating sector. Global Insight's model for total employment in the ERS participating sector has an R-square in excess of 0.82, which means that it explains more than 82% of the variation in total employment in the ERS participating sector over the 1989 to 2006 period. Global Insight's model for average wages in the ERS participating sector has an R-square in excess of 0.77, which means that it explains more than 77% of the variation in average wages in the ERS participating sector over the 1989 to 2006 period.

Global Insight's model projects that total employment in the ERS participating sector will increase on average for the next 50 years by 1.0% per year, from its current level of 176,837 employees in fiscal 2007 to a total of 284,970 employees by the year 2059. As discussed below, this increase, which is driven by growth in real gross national product, is the result of a growth in population of 0.2% per year, an increase in the labor participation rate from 47.0% of the population to 62.5% by 2059, a reduction in unemployment from 10.4% to 3.6%, a reduction in government employment as a percentage of total employment from 24% of the total to 19.2% by 2059, and an increase in employment in the ERS participating sector as a percentage of total government employment, from 58% of the total to 69% by 2059.

With respect to average wages in the ERS participating sector, the model projects that average wages, which are driven by labor productivity and the unemployment rate, will increase by an average of 3.5% per year for the next 50 years, from their fiscal year 2007 average of \$22,757 per employee to \$138,665 per employee by 2059.

The values of the four explanatory variables in Global Insight's model are forecasted by Global Insight's macroeconomic model for Puerto Rico, which is in turn fed by Global Insight's U.S. macroeconomic model. Some of the principal forecasts and assumptions of Global Insight's macroeconomic model for Puerto Rico are the following:

Puerto Rico's gross national product will increase in real terms (after deducting inflation) by approximately 2.0% per year for the next 50 years, from its current growth level of minus 1.8% in 2007 (which means that the economy contracted) to minus 2.4% in 2008, to a peak of approximately 3.7% in 2013, then decreasing to approximately 2.5% in 2020, 1.7% in 2040, and 1.5% in 2059. Real gross national product growth in Global Insight's macroeconomic model for Puerto Rico is driven by labor productivity, demographic trends, fixed capital formation and growth in the U.S. economy, which is in turn determined by Global Insight's U.S. macroeconomic model.

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- Puerto Rico's population will increase on average for the next 50 years by 0.2% per year, from the current level of 3.94 million people to a peak of 4.37 million people by the year 2044, and down slightly to 4.34 million people by 2059. Puerto Rico's projected population is taken from the United Nations Population Estimates and Projections.
- The percentage of the working age population that will be part of the labor force will increase from its current level of 47.0% to 62.5% by 2059.
- The unemployment rate will decrease from its current level of 10.4% of the labor force to 3.6% of the labor force by 2059.
- Government spending as a percentage of Puerto Rico's gross national product will remain constant near 18%.
- Employment in the government sector as a percentage of total employment will continue to decrease, from its current level of 24% to 19.2% by 2059.
- Employment in the ERS participating sector as a percentage of total government employment will increase, from its current level of 58% to 69% by 2059.
- Puerto Rico's tax structure and tax rates will remain constant.
- Inflation will average 2.3% per year, remaining high in the near term, trending down gradually over the medium term as global oil prices stabilize, and converging to the United States level in the long term.

#### Alternative "take-off" scenario

Global Insight contemplated four alternative scenarios that project higher and lower growth rates for covered payroll. Under the first alternative scenario, a marked increase in investment results in higher labor productivity and an acceleration of real economic growth over the medium and long term. In this "take off" scenario, annual real gross national product growth, after declining in 2007 and 2008, reaches 5.0% by 2011, peaks at 6.0% in 2017, and decelerates gradually to approximately 2.0% by 2059. As government efficiency and private investment increase, the government is able to undergo a significant restructuring and reduce government employment by 4.9% over the next five years. Government employment then remains unchanged until 2020, and increases thereafter at an average rate of 0.13% per year. However, the reduction in government employment is more than offset by higher government wages, which reach an average of \$307,312 by 2059, and covered payroll reaches \$63.7 billion by 2059.

# Alternative low inflation scenario

Under the second alternative scenario, inflation in Puerto Rico, which is currently higher than in the U.S., converges more rapidly to U.S. levels than under the baseline case. As a result, covered payroll reaches only \$33.6 billion in 2059.

# Alternative significant government downsizing scenario

Under the third alternative scenario, the government undergoes a major downsizing (without the benefit of higher economic growth). Employment in the public sector as a percentage of total employment in the Commonwealth is reduced more rapidly, decreasing from its current level to a level similar to that of the 50 states of the United States (14% of total employment) within the next ten years. In this alternative scenario, covered payroll reaches \$32.0 billion by 2059.

# Alternative employment in the ERS participating sector as a percentage of government employment remains constant scenario

Finally, under the fourth alternative scenario, employment in the ERS participating sector as a percentage of total government employment in the Commonwealth remains constant at its current level of approximately 58%, instead of increasing to 69% by year 2059 as in the base case scenario. In this alternative scenario, covered payroll reaches \$33.1 billion by 2059.

# **INVESTMENT CONSIDERATIONS**

Investors should carefully consider the following factors and other information in this Official Statement before deciding to invest in the Series C Bonds.

# The Bonds are limited, non-recourse obligations of the System

The Bonds are limited, non-recourse obligations of the System payable solely from and secured solely by Employer Contributions made after the date of issuance of the Bonds. The Bonds are not payable from or secured by any other assets of the System. The Bonds are not an obligation of the Commonwealth or any of its instrumentalities or political subdivisions, other than the System. In the event that Employer Contributions are less than the amounts required to pay debt service on the Bonds, the System will not be required to pay such debt service from its other assets, and bondholders may not receive the full amount due on the Bonds. The maturity of the Bonds is not subject to acceleration for any reason including non-payment of debt service of the Bonds.

The Act requires Government Employers to make the Employer Contributions that are the source of payment for the Bonds. If Government Employers fail to make their required Employer Contributions on time, or contribute less than the amount required, the Resolution requires the System to pursue all available legal remedies to collect such Employer Contributions as soon as possible. The System may, however, be unable to collect the full amount due or may not collect it in time to avoid a shortfall in the amount available to pay the Bonds. This may cause delays in the payment of interest on or principal of the Bonds, or ultimately result in the inability of the System to pay the Bonds.

# Employer Contributions may not increase as projected, in which case the System may not have sufficient funds to pay the Bonds

The projected debt service coverage ratio of the Bonds shown above in the tables under the heading "Projected Debt Service Coverage of the Bonds" is based on a model prepared by Global Insight, the System's consultant. The model projects the amount of government payroll for the next 50 years, which when multiplied by the current contribution rate of 9.275% (which the System assumes will remain in effect during the 50-year term of the Bonds), produces a projected level of Employer Contributions. The ratio between this projected level of Employer Contributions and the debt service requirements of the Bonds is the projected debt service coverage ratio of the Bonds. This means that projected Employer Contributions are expected to exceed debt service on the Bonds by at least the margin reflected by this ratio in each year.

The System may issue additional Senior Bonds payable from Employer Contributions, provided that the projected debt service coverage ratio for all Senior Bonds payable from Employer Contributions (including the Bonds proposed to be issued) is equal to or greater than 140% in each Bond Year. The System may also issue additional Subordinated Bonds payable from Employer Contributions, provided that the projected debt service coverage ratio for all Bonds payable from Employer Contributions (including the Bonds proposed to be issued) is equal to or greater than 125% in each Bond Year.

If future Employer Contributions are less than projected by an amount greater than the margin provided by the projected debt service coverage ratio at the time of issuance of any Bonds, the System will not receive sufficient funds to pay debt service on the Bonds. Employer Contributions could be less than projected for several reasons, some of which affect the projected number of participating employees, others that affect the projected level of wages, and others that affect both. Some of these reasons relate to demographic trends. Others relate to broad macroeconomic factors, some of which are specific to Puerto Rico, and some of which relate to the U.S. economy and the global economy. Still others relate to the attitudes of the population of Puerto Rico, the results of political elections, and public policy decisions. Many of these factors are interrelated. Some of these factors are discussed below.

The economy of Puerto Rico may not grow as contemplated in the Global Insight projections. The growth rate of Puerto Rico's gross national product is one of the measures of economic performance. The economic activity has an impact on both: total employment and the average wages. The Global Insight model projects that the Puerto Rico economy will grow at an average rate of 2.0% per year in real terms (i.e., after adjusting for inflation), over the next 50 years. The Puerto Rico economy has grown at an average rate of 2.5% per year in real terms during the past 25 years. During this period, the annual growth rate has been as high as 4.4% (in 1988) and as low as a contraction of 2.6% (in 1983). During the prior six years, the average annual compound growth rate has been 0.9%. Many factors can affect the performance of the economy in Puerto Rico, some of which relate specifically to Puerto Rico, and some of which are external in nature. These include the price of oil, which has adversely affected the Puerto Rico economy in recent years (Puerto Rico is highly dependent on oil for its energy needs), the availability of local and foreign capital, competition from other jurisdictions, the level of interest rates, the performance of the United States economy, tax rates, the level of government regulation, currency exchange rates, and the occurrence of natural disasters such as earthquakes or hurricanes. If the growth rate of the Puerto Rico economy is less than projected, government revenues could be lower than projected, which could adversely affect government payroll. This would reduce the amount of funds available to pay debt service on the Bonds.

Government employment as a percentage of total employment may be less than projected. In Global Insight's base case scenario, government employment as a percentage of total employment decreases from the current level of approximately 24% of total employment to approximately 19.2% by the year 2059. However, a number of factors could result in a smaller government sector as a percentage of the total economy, which could have an impact on the total number of employees in the ERS participating sector. In an alternative scenario of the Global Insight model, which involves a significant government downsizing without the benefit of higher economic growth, employment in the public sector as a percentage of total employment in the Commonwealth is reduced more rapidly than in the base case scenario. In this alternative scenario, government employment as a percentage of total employment decreases from its current level to a level similar to that of the 50 states of the United States (14% of total employment) within the next ten years. In this alternative scenario, covered payroll reaches only \$32.0 billion by 2059, instead of the \$39.5 billion projected by the base case scenario.

One factor that may have an impact on the size of the government sector is Puerto Rico's current fiscal situation. Puerto Rico has had budget deficits for the last several years. The two principal political parties have publicly stated their commitment to remedy this situation. Among the measures that are contemplated is a reduction in the number of central government employees, primarily through attrition. The current government administration has stated its commitment to this policy, and total government employment has declined by 0.5% over the last two fiscal years. Act No. 103 of May 25, 2006, also known as the "Fiscal Reform Act," sets forth as the public policy of the Commonwealth, among other goals, the reduction of central government spending and the reduction of the number of central government jobs without causing the layoff of regular employees or increasing the actuarial liability of the retirement systems.

Several other factors, including factors that cannot be predicted at this time, could affect the size of the government sector as a percentage of the total economy.

A reduction in government employment as a percentage of total employment would not necessarily result in lower covered payroll if the reduction in employment is offset by higher wages (as in Global Insight's alternative "take-off" scenario). However, unless higher economic growth produces such higher wages, a smaller government sector would result in lower Employer Contributions.

The percentage of government employees that are participating in the System may not increase as projected. In Global Insight's base case scenario, employment in the ERS participating sector as a percentage of total government employment in the Commonwealth continues its historical upward trend, increasing from its current level of 58% to 69% by year 2059. But this may not happen. In an alternative scenario of the Global Insight model, employment in the ERS participating sector as a percentage of total government employment in the Commonwealth remains constant at its current level. In this alternative scenario, covered payroll reaches only \$33.1 billion by 2059, instead of the \$39.5 billion projected by the base case scenario.

Inflation could be lower than projected by the Global Insight base case scenario. The base case scenario of the Global Insight model projects that inflation in Puerto Rico will remain high in the near term, will trend down gradually over the medium term as global oil prices stabilize, and will converge to the United States level in the long term. (United States and Puerto Rico inflation rates were similar during the periods from 1980 – 1989 and 1991 – 1993, at which time they started to diverge, with the Puerto Rico inflation level higher than that of the United States.) But inflation in Puerto Rico may converge to the U.S. level more quickly than projected. In one alternative scenario projected by Global Insight, inflation in Puerto Rico converges more rapidly to United States levels and the inflation

differential is eliminated over the next ten years. In this scenario, covered payroll reaches only \$33.6 billion in fiscal year 2059, instead of the \$39.5 billion projected by the base case scenario.

The population of Puerto Rico may not increase as projected. One of the components of the projected growth of employment in the ERS participating sector is population growth. The Global Insight model assumes in its projections that the population of Puerto Rico will increase from approximately 3.9 million in 2007 to approximately 4.3 million by 2059, an increase of 0.2% per year. If the population of Puerto Rico does not grow as projected, the number of government employees, and as a result covered payroll, may not grow as projected. Puerto Rico already has over 1,000 inhabitants per square mile, one of the highest population densities in the world. Most residents of Puerto Rico are United States citizens by birth and hence have unrestricted access to the United States mainland. As a result, the population of Puerto Rico may not grow as projected or may decrease, which could result in lower government employment and hence in lower Employer Contributions.

Government revenues may decrease, resulting in forced reductions in payroll; there may be a reduction in the demand for government services, or in the number of people required to provide these services. The tax and other revenues of the government of Puerto Rico may decrease for a number of reasons, including a reduction in tax rates as a result of taxpayer pressure leading to legislative action or otherwise, other reasons related to the factors discussed above, and other reasons that may not be anticipated, particularly considering the 50-year term of the Bonds. Any such reduction could eventually require a reduction in government expenses, including payroll expenses, which represent a significant percentage of government expenses in Puerto Rico. In addition, the demand for many of the services currently provided by the government may decrease, or an increase in employee productivity may make it possible to provide the same services with fewer employees. If any of these things happen, government employment and government payroll may be lower than projected, and hence there could be lower Employer Contributions than projected to pay debt service on the Bonds.

The Legislature of the Commonwealth could reduce the Employer Contribution rate or make other changes in existing law that adversely affect the amount of Employer Contributions. The Bonds are being issued pursuant to general authority contained in the Act, which does not include any covenant by the Legislature of the Commonwealth not to amend the Act in a way adverse to Bondholders. In addition, as is the case in many other jurisdictions, the Constitution of Puerto Rico does not contain provisions that expressly prohibit the Legislature from amending the Employer Contribution requirements under the Act. Therefore, the Legislature could make changes to the Act that are adverse to the Bondholders, including reducing the rate at which participating Government Employers are required to contribute to the System. If any such change is made, the ability of the System to pay debt service on Bonds when due could be adversely affected. It is impossible to predict at this time the conditions that could cause the Legislature of Puerto Rico to reduce the Employer Contribution rate, but those conditions could include situations (i) where the System's unfunded accrued liability has been reduced or eliminated, which could lead the Legislature to the conclusion (if it did not take into consideration the need to pay the Bonds) that additional Employer Contributions are not required, or (ii) where there is severe financial stress affecting one or more of the Government Employers.

# Public Debt of the Commonwealth Must be Paid Before Employer Contributions of Central Government Agencies and Departments

The Constitution of Puerto Rico provides that in the event the Commonwealth has insufficient funds to pay all approved appropriations, the available resources of the Commonwealth shall be used to pay public debt before being used for other purposes. Public debt, which as of May 7, 2008 amounted to \$49.4 billion, includes \$10.9 billion in bonds and notes of the Commonwealth to which the full faith, credit and taxing power of the Commonwealth are pledged, and, according to opinions rendered by the Secretary of Justice of the Commonwealth, any payments which are required to be made by the Commonwealth with respect to bonds and notes guaranteed by the Commonwealth, and includes bonds and notes issued by its public corporations. The \$49.4 billion excludes certain bonds and notes payable from available moneys of GDB. The Bonds do not constitute public debt. This Constitutional restriction does not apply to Employer Contributions made by public corporations and municipalities, because the funds of public corporations and municipalities are not "available resources" of the Commonwealth.

#### The Remedies that the Fiscal Agent May Pursue May be Limited

The remedies available to the Fiscal Agent and the holders of the Bonds upon an Event of Default do not include the right to declare all amounts immediately due and payable and are in many respects dependent upon regulatory and judicial actions which are often subject to discretion and delay. Such remedies may also not be readily available or may be limited, and the legal opinions rendered in connection with this financing will be qualified to the extent that enforceability of provisions of the Bonds and the Resolution are affected by such limitations, including as such enforceability may be limited by insolvency or other laws generally affecting creditors' rights.

# A redemption may adversely affect the return of bondholders on the Bonds

The System may choose to redeem some or all of the Series C Bonds, or some of the Series C Bonds may be redeemed to satisfy sinking fund requirements, at times when prevailing interest rates are lower than when the Series C Bonds were issued. If this happens, Bondholders may not be able to reinvest the proceeds received in a comparable security at an effective interest rate as high as that of the Bonds.

# The market value of the Bonds may be affected by a negative change in the ratings of the Bonds

The ratings initially assigned to the Series C Bonds may be lowered or withdrawn. Such rating changes could adversely affect the value of and market for the Bonds.

# Absence of secondary market for the Bonds

There is currently no secondary market for the Series C Bonds, and there can be no assurances that a secondary market will develop, or if it does develop, that it will provide Bondholders with liquidity for their investment or that it will continue for the life of the Series C Bonds. The Underwriters do not have a legal obligation to maintain a market for the Series C Bonds.

# Risks related to hedging transactions

The System may enter into interest rate swap agreements and other derivative transactions to hedge its exposure to interest rate changes and may enter into currency swap agreements in the event it issues Bonds denominated in other currencies. If the counterparties to these agreements fail to perform

their obligations, the System may be exposed to unanticipated interest rate changes and currency fluctuations that may reduce the amount of funds available to pay debt service on the Bonds.

# RECENT DEVELOPMENTS RELATING TO THE COMMONWEALTH OF PUERTO RICO

Currently, approximately 64% of Employer Contributions are made by agencies or departments of the Commonwealth's central government, and are funded in part from the central government's General Fund. The financial condition of the central government is, therefore, relevant to an evaluation of the risks associated with an investment in the Series C Bonds. For that reason, this Official Statement incorporates by reference (i) the Commonwealth's Financial Information and Operating Data Report, dated January 2, 2008 (the "Commonwealth Report"), which is included as an appendix to the Official Statement for the Commonwealth's Public Improvement Refunding Bonds, Series 2008 C, dated April 25, 2008, and (ii) the Commonwealth's Comprehensive Annual Financial Report for the fiscal year ended June 30, 2006, as amended (the "Commonwealth's Annual Financial Report"), prepared by the Department of the Treasury of Puerto Rico, which report includes the basic financial statements of the Commonwealth as of and for the fiscal year ended June 30, 2006 (the "Commonwealth Financial Statements"), which have been audited by KPMG LLP, independent auditors, as stated in their report dated August 1, 2007, accompanying such financial statements. KPMG LLP did not audit the financial statements of the Public Buildings Authority's capital project fund or The Children's Trust special revenue fund (major funds), and certain activities, funds, and component units separately identified in its report. Those financial statements were audited by other auditors whose reports have been furnished to KPMG LLP, and its opinions, insofar as they relate to the amounts included for activities, funds, and component units, separately identified in its report, are based solely on the reports of the other auditors. The report of KPMG LLP contains an explanatory paragraph referring to the Commonwealth's adoption of Governmental Accounting Standards Board (GASB) Statement No. 42, Accounting and Financial Reporting for Impairment of Capital Assets and for the Insurance Recoveries, as of June 30, 2006. The Official Statement that includes the Commonwealth Report and the Commonwealth's Annual Financial Report were filed by the Commonwealth with each nationally recognized municipal securities information repository ("NRMSIR").

Any appendix of an Official Statement of the Commonwealth or of any instrumentality of the Commonwealth containing any revision to the Commonwealth Report or to the Commonwealth's Annual Financial Report that is filed with each NRMSIR and the Municipal Securities Rulemaking Board, or any new or revised Commonwealth Report or Commonwealth Annual Financial Report or other documents containing information that modifies or supersedes the information contained in the Commonwealth Report or in the Commonwealth's Annual Financial Report that is filed with each NRMSIR, in each case after the date hereof and prior to the termination of the offering of the Bonds, shall be deemed to be incorporated by reference into this Official Statement and to be part of this Official Statement from the date of filing of such document. Any statement contained in the Commonwealth's Annual Financial Report shall be deemed to be modified or superseded for purposes of this Official Statement to the extent that a statement contained herein or in any such subsequently filed document modifies or supersedes such statement. Any statement contained in the Commonwealth Report or elsewhere herein shall also be deemed to be modified or superseded to the extent that a statement contained in any such subsequently filed document modifies or superseded such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Official Statement.

This section supplements and amends the information appearing in the Commonwealth Report and should be read in conjunction therewith.

# Fiscal Year 2008 Projected Revenues and Expenditures

As discussed in greater detail in the Commonwealth Report, the General Fund budget for fiscal year 2008 is \$9.227 billion. General Fund revenues for the ten-month period ending on April 30, 2008 totaled \$7,002 billion, which is \$42 million less than the Department of the Treasury's estimate for that period. This amount includes \$3.726 billion in revenues from individual and corporate income taxes, \$923 million from non-resident withholding taxes, \$715 million from excise taxes and \$755 million of sales tax revenues. The Commonwealth currently anticipates that for the full fiscal year 2008, General Fund revenues will total \$8.671 billion, while total expenditures will roughly equal the budgeted amounts of expenditures. The difference between revenues and expenses for fiscal year 2008 will be covered by a recovery of approximately \$287 million more in federal funds (already received) than had been budgeted, \$150 million from the sale of certain government properties, approximately \$60 million in delinquent income tax receivables, cash flow savings resulting from certain refunding transactions, and certain cash management procedures, which include delaying payments to certain vendors for a short period of time (carrying them over into the next fiscal year). The federal funds recovery represented reimbursement of amounts advanced by the Commonwealth's Department of Education during fiscal years 2006 and 2007. Expenditures relating to the Health Insurance Program could exceed their budgeted amounts. The Commonwealth's economic team is working together to enforce spending control measures that have been established to attempt to minimize this possibility.

### Fiscal Year 2009 Projected Revenues and Expenditures

On March 13, 2008, the Governor submitted a proposed General Fund budget for fiscal year 2009 of \$9.488 billion, or approximately \$261 million more than the estimated expenditures for fiscal year 2008 of \$9.227 billion. The increase in expenditures over fiscal year 2008 is mainly due to University of Puerto Rico, judiciary and municipal formula increases and salary increases mandated by law or collective bargaining agreements. An additional \$42.3 million is budgeted for the State Election Commission. The General Fund revenue projection for fiscal year 2009 is \$8.488 billion, a decrease of \$183 million, or 2.1%, from estimated net revenues for fiscal year 2008 of \$8.671 billion. Commonwealth's budgeted expenditures for fiscal year 2009 of \$9.488 billion exceed projected revenues of \$8.488 by approximately \$1 billion. The Commonwealth's economic team is working together to enforce spending control measures that have been established to attempt to minimize the budget risk. In addition, the Governor has proposed two special measures which are expected to generate close to \$1 billion in fiscal year 2009. These measures consist of a tax receivables financing and a concession agreement for operation of the lottery. Legislation authorizing these two measures was submitted by the Governor to the Legislature along with the budget. On June 25, 2008, the Legislature adopted a series of bills approving a General Fund budget for fiscal year 2009 of \$9.488 billion. In connection with the budget approval and in order to cover the approximately \$1 billion difference between approved expenditures and projected revenues, the Legislature also approved legislation creating a trust to enable a securitization structure using such tax receivables and authorizing the issuance of limited special obligations of the Commonwealth payable from and collateralized with tax receivables. The Legislature did not approve the legislation proposed by the Governor relating to the concession agreement for the operation of the lottery. The series of bills adopted by the Legislature approving the General Fund budget are subject to the Governor's review and final approval.

#### **Indictment of Governor of Puerto Rico**

On March 27, 2008, the Governor of Puerto Rico and several other individuals were named in federal grand jury indictments relating to the use of political contributions and campaign funds during the period when the Governor was Resident Commissioner in Washington, D.C. The Governor has denied any wrongdoing and has stated his intention to remain in his position and present his defense. It is not

expected that such developments will have any impact on the fiscal affairs of the Commonwealth or on the payment of any obligations issued by the Commonwealth.

# **Proposed Sales Tax and Excise Tax Changes**

On February 6, 2008, the Governor, in his State of the Commonwealth address, proposed suspending a portion of the current sales and use tax, for a reduction from 7% to 2.5%, and re-instituting a revamped excise tax on goods imported into Puerto Rico to help stimulate the Commonwealth's economy. The proposal will require passage of legislation to become law, and includes provisions that will continue the earmarking of sales tax revenues equal to 1% of the total sales tax rate to the Dedicated Sales Tax Fund and other mechanisms currently in place to ensure the security for the outstanding bonds of the Puerto Rico Sales Tax Financing Corporation ("COFINA"). See "Tax Reform" under Puerto Rico Taxes, Other Revenues and Expenditures, "Government Development Bank for Puerto Rico – Sales Tax Financing Corporation" under Public Corporations and "Public Sector Debt" under Debt in the Commonwealth Report. On February 7, 2008, the Governor stated that any proposal from his administration would not impair the rights of bondholders and that he will veto any counter-proposal from the Legislature of Puerto Rico that would constitute a possible impairment of the rights of bondholders. On February 7, 2008, Standard & Poor's Ratings Service ("S&P") placed the COFINA bonds on CreditWatch Negative and Fitch Ratings Ltd. ("Fitch") placed the same bonds on Rating Watch. On March 14, 2008, the Governor submitted to the Legislature a proposed bill establishing the conditions for suspending the collection of the 4.5% sales and use tax (which is the portion of the total sales and use tax to be collected for the General Fund), establishing and funding a debt service reserve fund for the benefit of the COFINA bonds and re-instituting the revamped excise tax. Said bill has been structured to safeguard the rights of COFINA bondholders and is aimed at preserving the current rating of the COFINA bonds. This action is expected to be revenue neutral for the General Fund. The legislation proposed by the Governor was not approved by the Legislature.

# **Planning Board Revised Economic Growth Estimates**

On February 21, 2008, the Planning Board, as part of its final review of fiscal year 2007 economic statistics, indicated that it expected to reduce the 2007 economic growth rate to -1.8% from -1.4% and that the forecast for fiscal years 2008 and 2009 will be lowered on account of the projected length of the current recession. The factors that influenced the Board's fiscal year 2007 indication included reductions in retail sales, private investment (especially in the construction sector) and government investment. Price increases in certain key areas such as energy and raw materials contributed to the Board's numbers as well.

During March 2008, the Planning Board confirmed its reduction of the fiscal year 2007 economic growth rate to -1.8% from -1.4%, and projected that the economic growth rate for the fiscal year ending June 30, 2008 will be -2.1% and the economic growth rate for the fiscal year ending June 30, 2009 will be 2.1%.

# Additional Debt Issued or Guaranteed by the Commonwealth

On May 7, 2008, the Commonwealth issued \$1,099,125,000 aggregate principal amount of its Public Improvement Refunding Bonds, Series 2008 A, 2008 B and 2008 C. These bonds were issued for the purpose of (i) reducing the Commonwealth's market risk associated with certain types of variable rate products, including auction rate securities and variable rate demand obligations insured by monoline bond insurers that have recently been downgraded by the rating agencies, and (ii) realizing debt service savings.

On March 18, 2008, Puerto Rico Aqueduct and Sewer Authority issued \$159,055,000 of Revenue Refunding Bonds, 2008 Series A, and \$125,700,000 of Revenue Refunding Bonds, 2008 Series B, guaranteed by the Commonwealth of Puerto Rico. Although these bonds were not issued by the Commonwealth, the payment of principal of and interest on said bonds is guaranteed by the Commonwealth.

#### THE SERIES C BONDS

#### General

The following summary is qualified by reference to the General Resolution and the Supplemental Resolution, copies of which are set forth in Appendices V and VI, respectively. Capitalized terms not defined below are defined in the Resolution.

The Resolution authorizes the issuance of Senior Bonds and Subordinated Bonds. The Series C Bonds are Senior Bonds.

The Series C Bonds will be dated their date of delivery and will be issued as term bonds (the "Term Bonds") and as capital appreciation bonds (the "Capital Appreciation Bonds"), in the principal amounts, bearing interest at the rates, or compounding at the yields (in the case of the Capital Appreciation Bonds), and maturing (subject to the rights of redemption described below) on the dates, all as shown on the inside cover page of this Official Statement.

Interest on the Series C Bonds will accrue, or compound (in the case of the Capital Appreciation Bonds), from their date of delivery. Interest on the Term Bonds will be payable monthly on the first day of each month, commencing on August 1, 2008. Interest on the Capital Appreciation Bonds will not be paid on a current basis, but will be added to the principal of the Capital Appreciation Bonds on each January 1 and July 1, commencing on January 1, 2009 (each, a "Compounding Date"), and will be treated as if accruing in equal daily amounts between Compounding Dates, until paid at maturity or upon redemption. The principal amount of the Capital Appreciation Bonds on each Compounding Date (also referred to as their "Accreted Amount") is set forth in Appendix IX. Interest shall be computed on the basis of a 360-day year consisting of twelve 30-day months.

For purposes of this Official Statement, references to "principal" shall mean, in the case of the Capital Appreciation Bonds, the Accreted Amount thereof.

The Series C Bonds will be issued as fully registered bonds without coupons in denominations of \$5,000 principal amount (or maturity amount in the case of the Capital Appreciation Bonds) and integral multiples thereof. The Bonds will be registered under The Depository Trust Company's Book-Entry Only system described in Appendix VIII. Bond certificates will not be delivered to purchasers of the Series C Bonds. Transfers of ownership, and payment on the Bonds will be effected by The Depository Trust Company ("DTC") and its Participants pursuant to rules and procedures established by DTC and its Participants. See "Book entry system" on Appendix VIII.

#### Redemption

Optional Redemption. The Series C Bonds are subject to redemption at the option of the System from any source, in whole or in part, at any time on or after July 1, 2018, at a redemption price equal to the principal amount (in the case of the Capital Appreciation Bonds, the Accreted Amount) of the Series C Bonds, plus accrued interest to the redemption date, and without premium.

Mandatory Sinking Fund Redemption. The Term Bonds shall be redeemed in part, by lot, through application of Sinking Fund Installments as provided in the Resolution, in each case at a Redemption Price equal to the principal amount or portion thereof to be redeemed, together with interest accrued to the date fixed for redemption. Subject to the provisions of the Resolution permitting amounts to be credited toward part or all of any Sinking Fund Installment, with respect to the Series C Bonds due on each of the dates specified below, there shall be due, and the System shall in any and all events be required to pay, on each Sinking Fund Installment date set forth in the following table the amount set opposite such date, and said amount shall constitute a Sinking Fund Installment for the retirement of such Series C Bonds:

#### **Term Bonds maturing July 1, 2028**

Sinking Fund Installment Date July 1,	Sinking Fund Installment
2024	\$18,700,000
2025	22,000,000
2026	29,150,000
2027	36,300,000
2028	3,850,000*

<sup>\*</sup>Final Maturity

#### **Term Bonds maturing July 1, 2038**

Sinking Fund Installment Date July 1,	Sinking Fund Installment
2029	\$ 100,000
2030	540,000
2031	100,000
2032	3,420,000
2033	4,320,000
2034	100,000
2035	11,940,000
2036	2,160,000
2037	7,920,000

#### Term Bonds maturing July 1, 2038

Sinking Fund Installment Date	<b>Sinking Fund</b>
July 1,	Installment
2038	14,400,000*

<sup>\*</sup>Final Maturity

#### **Term Bonds maturing July 1, 2043**

Sinking Fund Installment Date July 1,	Sinking Fund Installment
2039	\$28,600,000
2040	28,600,000
2041	28,600,000
2042	28,600,000
2043	28,600,000*

<sup>\*</sup>Final Maturity

Notice of Redemption. In the event any Series C Bonds are called for redemption, the System shall give the Fiscal Agent notice ("Notice") at least 40 days prior to the date fixed for redemption (or such shorter period which is acceptable to the Fiscal Agent), and the Fiscal Agent shall give notice, in the name of the System, at least 30 days prior to the date fixed for redemption to DTC, or if the Book-Entry Only System is discontinued as described herein, to the registered owners of the Series C Bonds or portions thereof to be redeemed (with copies to the Fiscal Agent); provided, however, that failure to give such Notice to DTC or to any registered owner, or any defect therein, shall not affect the validity of any proceedings for the redemption of any of the Series C Bonds or portions thereof for which proper notice was given. If a Notice of redemption shall be unconditional, or if the conditions of a conditional Notice shall have been satisfied, then upon presentation and surrender of the Series C Bonds or portions thereof so called for redemption at the place or places of payment, such Series C Bonds or such portion shall be redeemed.

The Notice shall (a) specify (i) the Series C Bonds or portions thereof to be redeemed, (ii) the redemption date, (iii) the redemption price, (iv) the place or places where amounts due upon such redemption will be payable (which shall be the principal office of the Fiscal Agent), and (v) if less than all of the Series C Bonds are to be redeemed, the CUSIP identification numbers, the numbers of the Series C Bonds, and the portions of the Series C Bonds to be redeemed, (b) state any condition permitted in, or not expressly prohibited by, the Resolution to such redemption, and (c) state that on the redemption date, and upon the satisfaction of any such condition, the Series C Bonds or portions thereof to be redeemed shall cease to bear interest (in the case of the Capital Appreciation Bonds, the Accreted Amount thereof shall cease to increase).

Any notice of optional redemption of Series C Bonds may be made conditional upon receipt by the Fiscal Agent on or prior to the date fixed for redemption of moneys sufficient to pay the principal of (or Accreted Amount, in the case of the Capital Appreciation Bonds) and interest on such Series C Bonds

or such portions to be redeemed, or upon the satisfaction of any other condition or the occurrence of any other event, which notice shall specify any such conditions or events. Any conditional notice so given may be rescinded at any time before payment of such principal of (or Accreted Amount, in the case of the Capital Appreciation Bonds) and interest on such Series C Bonds or such portions thereof if any such condition so specified is not satisfied or if any such other event shall not occur. Notice of such rescission shall be given by the System to the Fiscal Agent at least two Business Days prior to the scheduled date of redemption, and the Fiscal Agent shall give notice of such rescission to affected owners of Series C Bonds at least one Business Day prior to such scheduled date of redemption, in the same manner as the conditional notice of redemption was given.

If notice of redemption is given and if sufficient funds are on deposit with the Fiscal Agent to provide for the payment of the principal of (or Accreted Amount, in the case of the Capital Appreciation Bonds) and premium, if any, and interest on the Series C Bonds (or portions thereof) to be redeemed, then the Series C Bonds (or portions thereof) so called for redemption will, on the redemption date, cease to bear interest (in the case of the Capital Appreciation Bonds, the Accreted Amount thereof shall cease to increase), and shall no longer be deemed outstanding under or be entitled to any benefit or security under the Resolution.

#### **Amendment of Resolution**

The System may adopt a Supplemental Resolution amending or supplementing the Resolution for any of the following purposes without the consent of any Bondholder:

- (i) to close the Resolution against, or provide limitations and restrictions in addition to the limitations and restrictions contained in the Resolution on, the authentication and delivery of the Bonds or the issuance of other evidences of indebtedness;
- (ii) to add to the covenants and agreements of the System in the Resolution other covenants and agreements to be observed by the System which are not contrary to or inconsistent with the Resolution as theretofore in effect;
- (iii) to add to the limitations and restrictions in the Resolution other limitations and restrictions to be observed by the System which are not contrary to or inconsistent with the Resolution as theretofore in effect;
- (iv) to surrender any right, power or privilege reserved to or conferred upon the System by the Resolution to the extent such surrender is for the benefit of the Owners of the Bonds;
- (v) to authorize Bonds of a Series and, in connection therewith, specify and determine various matters which are not contrary to or inconsistent with the Resolution;
- (vi) to confirm, as further assurance, any pledge and assignment under, and the subjection to any lien, assignment or pledge created or to be created by, the Resolution, of the Pledged Property or of any other moneys, securities, funds or accounts;
- (vii) to modify any of the provisions of the Resolution as may be necessary or desirable to provide for the issuance of Bonds in book entry form;
  - (viii) to cure any ambiguity, defect or inconsistent provision in the Resolution;

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- (ix) if Bonds of such Series are Adjustable Rate Bonds, Capital Appreciation Bonds, Convertible Capital Appreciation Bonds or Bonds hedged or to be hedged by a Qualified Hedge, or the Supplemental Resolution authorizes a Qualified Hedge on Bonds previously issued, to add provisions specifying the method of calculating the Accrued Payment Obligation with respect to such Bonds, for purposes of the Debt Service Reserve Requirement and the additional Bonds tests;
- (x) to provide such provisions with respect to Subordinated Bonds as are necessary and desirable, *provided*, that no such provisions shall adversely affect the payment priorities under the Resolution of any Bonds then Outstanding;
- (xi) to provide for a security interest on the Pledged Property for the payment and as security for Credit Facilities, Liquidity Facilities and Qualified Hedges; or
- (xii) to insert such provisions clarifying matters or questions arising under the Resolution as are necessary or desirable and are not contrary to or inconsistent with the Resolution as theretofore in effect.

In addition, the System may amend the Resolution and modify the rights and obligations of the System and of the Owners of the Bonds by a Supplemental Resolution, with the written consent (i) of the Owners of at least a majority in principal amount of the Bonds Outstanding at the time such consent is given, and (ii) in case less than all of the several Series of Bonds then Outstanding are affected by the modification or amendment, of the Owners of at least a majority in principal amount of the Bonds of each Series so affected and Outstanding at the time such consent is given. No such modification or amendment shall permit a change in the terms of redemption or maturity of the principal (or Accreted Amount, if applicable) of any Outstanding Bond or of any installment of interest thereon or a reduction in the principal amount (or Accreted Amount, if applicable) or the Redemption Price thereof or in the rate of interest thereon without the consent of each Bondowner affected thereby, or shall reduce the percentage of the aggregate principal amount (or Accreted Amount, if applicable) of Bonds or otherwise affect classes of Bonds the consent of the Owners of which is required to effect any such modification or amendment without the consent of all Bondowners, or shall change or modify any of the rights or obligations of the Fiscal Agent without its written consent thereto, or shall change or modify any of the rights of the providers of Qualified Hedges, Credit Facilities or Liquidity Facilities regarding source of and security for payments due to such Persons, or amount and timing of payments due, without the prior written consent of such Persons. A Series shall be deemed to be affected by a modification or amendment of the Resolution if the same adversely affects or diminishes the rights of the Owners of Bonds of such Series. The Fiscal Agent may, but shall not be obligated to, determine whether or not in accordance with the foregoing powers of amendment, Bonds of any particular Series or maturity would be affected by any modification or amendment of the Resolution, and any such determination if reasonable and in good faith shall be binding and conclusive on the System and all Owners of Bonds.

#### **Events of Default and Remedies**

Each of the following events shall constitute an Event of Default under the Resolution:

(i) There shall occur a default in the payment of principal or Redemption Price of or interest on any Bond or payments due to any Parity Obligation or any Subordinate Obligation related thereto in the Currency in which such Bond, Parity Obligation or Subordinate Obligation is payable, after the same shall have become due, whether at maturity or upon call for redemption or otherwise; or

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(ii) There shall occur a failure to observe, or a refusal to comply with, the terms of the Resolution or the Bonds, other than a failure or refusal constituting an event specified in paragraph (i) above; provided, however, that with respect to any failure to observe or refusal to comply with the covenants and agreements set forth in the Resolution, such failure or refusal shall have continued for a period of 30 days after written notice, specifying such failure and requesting that it be remedied, is given to the System by the Fiscal Agent or any Beneficiary. If prior to the expiration of the above mentioned 30-day period, the System shall request in writing an extension of time and the System shall certify in such request that the failure stated in the notice cannot be remedied within such 30-day period, then such 30-day period shall be extended for an additional 30 days if corrective action has been instituted by the System and is being diligently pursued.

Upon the occurrence of an Event of Default, the Fiscal Agent may, and upon the written request of the Owners of not less than 25% in principal amount of the Outstanding Bonds shall, proceed to protect and enforce its rights and the rights of the Bondowners by such of the following remedies as the Fiscal Agent, being advised by counsel, shall deem most effectual to protect and enforce such rights:

- (i) by suit, action or proceeding to enforce all rights of the Bondowners, including the right to collect or require the System to collect Revenues adequate to carry out the covenants, agreements and assignments with respect thereto contained in the Resolution and to require the System to carry out any other covenant or agreement with Bondowners and to perform its duties under the Act;
- (ii) by suit upon the Bonds limited, upon recovery thereunder, to the Pledged Property pledged and assigned under the Resolution;
- (iii) by action or suit in equity, to require the System to account as if it were the trustee of an express trust for the Bondowners, for the Pledged Property pledged and assigned under the Resolution as shall be within its control; and
- (iv) by action or suit in equity, to enjoin any acts or things which may be unlawful or in violation of the rights of the Bondowners or the Beneficiaries.

### The maturity of the Bonds is not subject to acceleration for any reason, including non payment of debt service of the Bonds or any other Event of Default.

In the enforcement of any remedy under the Resolution, the Fiscal Agent shall be entitled to sue for, enforce payment on and receive any and all amounts then or during any default becoming and at any time remaining, due from the System for principal, Redemption Price, interest or otherwise for Bonds under any provision of the General Resolution or the Supplemental Resolution or of or on the Bonds, and unpaid with interest on overdue payments, to the extent permitted by law, at the rate or rates of interest specified in the Bonds, together with any and all costs and expenses of collection and of all proceedings under the Resolution and under the Bonds, without prejudice to any other right or remedy of the Fiscal Agent or of the Bondowners, and to recover and enforce judgment or decree against the System for any portion of such amounts remaining unpaid, with interest, costs and expenses, in any manner provided by law, the moneys adjudged or decreed to be payable.

After making provision for the payment of any reasonable expenses of the Fiscal Agent and its agents and attorneys necessary in the opinion of the Fiscal Agent to protect the interests of the Owners of the Bonds and the other Beneficiaries, and for the payment of the reasonable charges and expenses and liabilities incurred and advances made by the Fiscal Agent and its agents and attorneys in the performance

of their duties under the Resolution, in the event that the funds held by the Fiscal Agent shall be insufficient for the payment of interest and principal or Accreted Amount or Redemption Price then due on the Bonds in the Currency or Currencies in which such Bonds are payable, respectively, and other amounts payable as described in clauses FIRST through SEVENTH below, such funds (excluding funds held for the payment or redemption of particular Bonds which have theretofore become due at maturity or by call for redemption) and any other moneys received or collected by the Fiscal Agent and any moneys or other property distributable in respect of the System's obligations under the Resolution after the occurrence of an Event of Default, shall be applied as follows:

FIRST: to the payment to the Persons entitled thereto of regularly scheduled fees payable under each Ancillary Bond Facility;

SECOND: to the payment to the Persons entitled thereto of all installments of interest on the Senior Bonds and the interest component of Parity Obligations then due, and thereafter, in the order such installments are due, and, if the amount available shall not be sufficient to pay in full any installment due on the same date, then to the payment thereof ratably, according to the amounts due on such date, without any discrimination or preference, except as to any difference in the respective rates of interest specified in such Bonds and Parity Obligations, and then to the payment of any interest due and payable after maturity on such Bonds and the interest component of the Parity Obligations, ratably, to the Persons entitled thereto, without any discrimination or preference except as to any difference in the respective rates of interest specified in such Bonds and the Parity Obligations;

THIRD: to the payment to the Persons entitled thereto of the unpaid principal or Redemption Price of the Senior Bonds and the unpaid principal component of Parity Obligations, which shall have become due, whether at maturity or by call for redemption, in the order of their due dates and, if the amount available shall not be sufficient to pay in full all such Bonds and the principal component of Parity Obligations due on the same date, then to the payment thereof ratably, according to the amounts of principal or Redemption Price due on such date, without any discrimination or preference;

FOURTH: to the payment to the Persons entitled thereto of all installments of interest on the Subordinated Bonds and the interest component of Subordinate Obligations then due, and thereafter, in the order such installments are due, and, if the amount available shall not be sufficient to pay in full any installment due on the same date, then to the payment thereof ratably, according to the amounts due on such date, without any discrimination or preference, except as to any difference in the respective rates of interest specified in such Bonds and Subordinate Obligations, and then to the payment of any interest due and payable after maturity on such Bonds and the interest component of Subordinate Obligations, ratably, to the Persons entitled thereto, without any discrimination or preference except as to any difference in the respective rates of interest specified in such Bonds and Subordinate Obligations;

FIFTH: to the payment to the Persons entitled thereto of the unpaid principal or Redemption Price of the Subordinated Bonds and the unpaid principal component of Subordinate Obligations for the Subordinated Bonds, which shall have become due, whether at maturity or by call for redemption, in the order of their due dates and, if the amount available shall not be sufficient to pay in full all such Bonds and the principal component of Subordinate Obligations due on the same date, then to the payment thereof ratably, according to the amounts of principal or Redemption Price due on such date, without any discrimination or preference;

SIXTH: to the payment to the Persons entitled thereto of amounts reimbursable or payable by the System under each Credit Facility for draws or payments thereunder to pay principal of or interest on Bonds, whether such reimbursements or payments are made to the Credit Facility Provider as a Bondowner, as a subrogee or otherwise; and

SEVENTH: to the payment to the Persons entitled thereto of amounts payable by the System under each Credit Facility, Liquidity Facility and Qualified Hedge not constituting Parity Obligations or payable pursuant to clauses FIRST through SIXTH of this paragraph.

#### **Bondowners' Direction of Proceedings**

Except as otherwise provided in the Resolution, the Owners of a majority in principal amount of the Bonds then Outstanding shall have the right, by an instrument or concurrent instruments in writing executed and delivered to the Fiscal Agent, to direct the method of conducting remedial proceedings to be taken by the Fiscal Agent, provided that such direction shall not be otherwise than in accordance with law or the provisions of the Resolution, and that the Fiscal Agent shall have the right to decline to follow any such direction which in the opinion of the Fiscal Agent would be unjustly prejudicial to Bondowners not parties to such direction or would involve the Fiscal Agent in personal liability.

#### **Limitation on Rights of Bondowners**

No Owner of any Bond shall have any right to institute any suit, action, mandamus or other proceeding in equity or at law under the Resolution, or for the protection or enforcement of any right under the Resolution unless such Owner shall have given to the Fiscal Agent written notice of the Event of Default or breach of duty on account of which such suit, action or proceeding is to be taken, and unless the Owners of not less than 25% in principal amount of the Bonds then Outstanding shall have made written request of the Fiscal Agent after the right to exercise such powers or right of action, as the case may be, shall have occurred, and shall have afforded the Fiscal Agent a reasonable opportunity either to proceed to exercise the powers granted under the Resolution or under the law or to institute such action, suit or proceeding in its name and unless, also, there shall have been offered to the Fiscal Agent reasonable security and indemnity against the costs, expenses (including legal fees and expenses) and liabilities to be incurred therein or thereby, and the Fiscal Agent shall have refused or neglected to comply with such request within a reasonable time; and such notification, request and offer of indemnity are declared under the Resolution in every such case to be conditions precedent to the execution of the powers under the Resolution or for any other remedy provided under the Resolution or by law.

No one or more Owners of the Bonds or other Beneficiary secured under the Resolution shall have any right in any manner whatever by his or their action to affect, disturb or prejudice the security of the Resolution, or to enforce any right under the Resolution or under law with respect to the Bonds, or the Resolution, except in the manner provided in the Resolution, and all proceedings at law or in equity shall be instituted, had and maintained in the manner provided in the Resolution and for the benefit of all Owners of the Outstanding Bonds. Nothing contained in the Resolution shall affect or impair the right of any Bondowner to enforce the payment of the principal (or Accreted Amount, if any) of and interest on such Owner's Bonds or the obligation of the System to pay the principal (or Accreted Amount, if any) of and interest on each Bond issued under the Resolution to the Owner thereof at the time and place in said Bond expressed.

Each Owner of any Bond by such Bondowner's acceptance thereof shall be deemed to have agreed that any court in its discretion may require, in any suit for the enforcement of any right or remedy under the Resolution, or in any suit against the Fiscal Agent for any action taken or omitted by it as Fiscal

Agent, the filing by any party litigant in such suit of an undertaking to pay the reasonable costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable pre-trial, trial and appellate attorneys' fees, against any party litigant in any such suit, having due regard to the merits and good faith of the claims or defenses made by such party litigant; but the preceding limitation shall not apply to any suit instituted by the Fiscal Agent, to any suit instituted by any Bondowner or group of Bondowners holding at least 25% in principal amount of the Bonds then Outstanding, or to any suit instituted by any Bondowner for the enforcement of the payment of any Bond on or after the respective due date thereof expressed in such Bond.

#### **Book Entry Only System**

The information contained in Appendix VIII to this Official Statement concerning DTC and DTC's book-entry only system has been obtained from sources that the System and the Underwriters believe to be reliable, but neither the System nor the Underwriters take responsibility for the accuracy thereof.

The System cannot and does not give any assurances that DTC or DTC direct or indirect Participants will distribute to the Beneficial Owners of the Series C Bonds: (i) payments of principal and interest payments (including redemption payments) with respect to the Series C Bonds; (ii) confirmation of ownership interest in the Series C Bonds; or (iii) notices sent to DTC or Cede & Co., its nominee, as the registered owner of the Series C Bonds, or that they will do so on a timely basis, or that DTC or the DTC Participants will serve and act in the manner described in this Official Statement.

None of the System nor the Fiscal Agent or any agent of the System or the Fiscal Agent will have any responsibility or obligations to DTC, the DTC Participants, or the Beneficial Owners with respect to: (i) the accuracy of any records maintained by DTC or any DTC Participants; (ii) the payment by DTC or any DTC Participants of any amount due to any Beneficial Owner in respect of principal and interest payments (including redemption payments) on the Series C Bonds; (iii) the delivery by DTC or any DTC Participants of any notice to any Beneficial Owner that is required or permitted to be given to owners under the terms of the Series C Bonds; or (iv) any consent given or other action taken by DTC as registered owner of the Series C Bonds. See Appendix VIII - Book-Entry System.

#### **Definitive Bonds**

In the event the System determines that it is in the best interest of the Beneficial Owners that they be able to obtain Series C Bond certificates, the System may notify DTC and the Fiscal Agent, whereupon DTC will notify the Participants, of the availability through DTC of the Series C Bond certificates, subject to DTC procedures. In such event, the System shall issue, and the Fiscal Agent shall transfer and exchange, Series C Bond certificates as requested by DTC and any other Series C Bond owners in appropriate amounts. DTC may determine to discontinue providing its services with respect to the Series C Bonds at any time by giving notice to the System and the Fiscal Agent and discharging its responsibilities with respect thereto under applicable law. Under such circumstances (if there is no successor securities depositary), the System and the Fiscal Agent shall be obligated to deliver Series C Bond certificates as described in the General Resolution. In the event Series C Bond certificates are issued, the provisions of the General Resolution shall apply to, among other things, the transfer and exchange of such certificates and the method of payment of principal and Redemption Price of and interest on such certificates. Whenever DTC requests the System and the Fiscal Agent to do so, the Fiscal Agent and the System will cooperate with DTC in taking appropriate action after reasonable notice (i) to make available one or more separate certificates evidencing the Series C Bonds to any DTC Participant

having Series C Bonds credited to its DTC account or (ii) to arrange for another securities depositary to maintain custody of certificates evidencing the Series C Bonds.

Upon surrender by DTC of the definitive Series C Bonds and instructions for registration, the System will issue the definitive Bonds, and thereafter the Fiscal Agent will recognize the registered holders of the definitive Series C Bonds as Bondholders under the Resolution.

The Fiscal Agent will make payments of principal of and interest on the Series C Bonds directly to Bondholders in accordance with the procedures set forth in the Resolution. The Fiscal Agent will make interest payments and principal payments to Bondholders in whose names the definitive Series C Bonds were registered at the close of business on the related record date. The Fiscal Agent will make payments by check mailed to the address of the Bondholder as it appears on the register maintained by the Fiscal Agent or in such other manner as may be provided in the Resolution, except that certain payments will be made by wire transfer as described in the Resolution. The Fiscal Agent will make the final payment on any Series C Bond (whether definitive Series C Bonds or registered in the name of Cede & Co.), however, only upon presentation and surrender of the Series C Bond on the final payment date at the office or agency that is specified in the notice of final payment to Bondholders.

Definitive Series C Bonds will be transferable and exchangeable at the offices of the transfer agent and registrar, which initially will be the Fiscal Agent. There will be no service charge for any registration of transfer or exchange, but the transfer agent and registrar may require payment of a sum sufficient to cover any tax or other governmental charge imposed in connection therewith.

#### SECURITY AND SOURCES OF PAYMENT FOR THE BONDS

The following summary is qualified by reference to the General Resolution and the Supplemental Resolution, copies of which are set forth in Appendices V and VI, respectively.

#### Bonds are Limited, Non-Recourse Obligations of the System

The Bonds are limited, non-recourse obligations of the System, payable solely from and secured solely by Employer Contributions made after January 31, 2008, which was the date of issuance of the first series of Bonds, and funds on deposit with the Fiscal Agent in the various accounts established under the Resolution. The Bonds are not general obligations of the System and are not payable from contributions made to the System by participating employees, or from the assets acquired with the proceeds of the Bonds, or from Employer Contributions released by the Fiscal Agent to the System after funding of required reserves, or from any other assets of the System. The Bonds are not obligations, general, special or otherwise, of the Commonwealth, do not constitute a debt of the Commonwealth or any of its other political subdivisions or instrumentalities, and are not payable out of any moneys of the Commonwealth other than future Employer Contributions.

The Employer Contributions are those contributions that Government Employers must contribute to the System pursuant to the Act. The Act requires that Employer Contributions cover the difference between (i) the benefits provided by the System to its beneficiaries, plus administrative costs, and (ii) the contributions that employees are required to make to the System. The Act further provides that the employers must contribute every year at least 9.275% of the wages and salaries paid to their employees.

The Legislature of the Commonwealth could reduce the Employer Contribution rate or make other changes in existing law that adversely affect the amount of Employer Contributions; Safeguards for Payment of Employer Contributions to the System

The Bonds are being issued pursuant to general authority contained in the Act, which does not include any covenant by the Legislature of the Commonwealth not to amend the Act in a way adverse to Bondholders. In addition, as is the case in many other jurisdictions, the Constitution of Puerto Rico does not contain provisions that expressly prohibit the Legislature from amending the Employer Contribution requirements under the Act. Therefore, the Legislature could make changes to the Act that are adverse to the Bondholders, including reducing the rate at which participating Government Employers are required to contribute to the System. If any such change is made, the ability of the System to pay debt service on Bonds when due could be adversely affected.

The following factors may, however, provide some protection to Bondholders:

- In a 1987 case dealing with the retirement system of the University of Puerto Rico, the Puerto Rico Supreme Court ruled that government retirement system participants have a contractual vested right to their pension benefits on account of their employment and participation in the retirement system. The Court further ruled that as a result, the Legislature may not alter public employees' pension rights unless the proposed amendments are reasonable and promote the actuarial solvency of the retirement system. In its decision, the Court upheld amendments that established a minimum retirement age, increased employee contributions, and reduced the pension benefits received by participants who retired before a certain age, because these were reasonable and necessary to save the actuarial solvency of the system, which at the time was in a "serious actuarial crisis." Although the case dealt with the ability of the government to affect the retirement benefits and not with their funding or the rights of bondholders, and, therefore, Bondholders may not have standing under the holding of this case to challenge any proposed amendment to the Act that adversely affects Bondholders, Bondholders may benefit indirectly from the actions of System participants in the event the Legislature proposes to reduce Employer Contributions and System participants challenge such proposed reduction on the basis of the above ruling.
- The System is required under the Resolution to uphold, enforce and defend its rights to receive the current statutorily required Employer Contributions under the Act. If the Legislature attempts to decrease Employer Contributions, the System must use its best efforts to prevent the adoption of such decrease and to challenge in court legislation that reduces statutorily required Employer Contributions that the System feels is contrary to applicable law including, but not limited to, the Commonwealth's Constitution and the rulings of the Puerto Rico Supreme Court.
- Although the Legislature is not legally required to take into account the System's opposition to any proposed amendment to the Act, the Legislature has never taken any action that had the effect of impairing the ability of a Puerto Rico government instrumentality to pay its debt, and has always appropriated funds required to pay debt service, even if not legally obligated to do so.
- The Legislature has not reduced the Employer Contribution rate since 1960, and the last employer increase occurred in 1990, which contribution rate is still in effect.

The Act provides the System with special powers to compel employers to make required contributions to the System. The System has the power to notify and require employers to make required contributions or show cause why they are prevented from making them. The head of an agency, the mayor of a municipality or the head of a public corporation that is a participating employer and does not comply with these requests is guilty of a felony punishable by imprisonment.

In addition, the System is authorized to suspend pre-retirement benefits (loans) to a participating employer's employees if its Employer Contributions are three months past due.

#### **Bonds are Issued Pursuant to Resolution**

The Series C Bonds are being issued pursuant to the to the General Resolution and the Supplemental Resolution, copies of which are set forth in Appendices V and VI, respectively. The Resolution appoints The Bank of New York as Fiscal Agent, with certain duties and responsibilities relating to the authentication and payment of the Series C Bonds, the deposit of future Employer Contributions in the various funds and accounts established under the Resolution, and other matters.

Capitalized terms not defined herein shall have the meaning ascribed to them in the General Resolution and the Supplemental Resolution.

#### Pledge of Employer Contributions Pursuant to Security Agreement

As provided in the Resolution, the System entered into a Security Agreement with the Fiscal Agent for the benefit of the Bondholders, pursuant to which the System will pledge to the Fiscal Agent, and will grant to the Fiscal Agent a security interest in, Employer Contributions made after January 31, 2008, which was the date of issuance of the first series of Bonds, and the funds on deposit with the Fiscal Agent under the various accounts established under the Resolution.

The Resolution and the Security Agreement constitute a contract between the System and the Fiscal Agent, on behalf of the owners of the Bonds. The pledge, covenants and agreements of the System set forth in the Resolution and the Security Agreement shall be for the equal benefit, protection and security of the owners of all the Bonds, regardless of time or times of their issuance or maturity, and shall be of equal rank, without preference, priority or distinction of any of the Bonds over any other Bond, except as expressly provided in or permitted by the Resolution. The pledge by the System of the Pledged Funds, which consist of all Employer Contributions that are made after January 31, 2008, which was the date of issuance of the first series of Bonds, in accordance with the Act and amounts on deposit in the different accounts created pursuant to the Resolution for the benefit of the owners of the Bonds, is irrevocable so long as any Bonds are outstanding under the terms of the Resolution.

#### **Deposit of Employer Contributions with the Fiscal Agent**

The System has agreed to deposit all Employer Contributions made after January 31, 2008, which was the date of issuance of the first series of Bonds, with the Fiscal Agent on the last Business Day of each month.

#### **Funds and Accounts**

The Resolution creates the Project Fund, and within such Fund it creates the Capitalized Interest Account, the Revenue Account, the Senior Bonds Debt Service Account, the Senior Bonds Debt Service Reserve Account, the Subordinated Bonds Debt Service Reserve Account, the General Reserve Account, and the Redemption Account. All accounts and subaccounts created pursuant to the Resolution and the monies held in such accounts or subaccounts are pledged to the payment of the Bonds.

**Revenue Account.** All Revenues, including the Employer Contributions, shall be deposited in the Revenue Account. After payment to the Fiscal Agent of all amounts payable to the Fiscal Agent, amounts on deposit from time to time in the Revenue Account shall be used to make the following payments and deposits or for the following purposes in the following order:

<u>first</u>, to the Senior Bonds Debt Service Account, allocated on a pro rata basis between the Principal Subaccount and the Interest Subaccount, until the amount on deposit in the Senior Bonds Debt Service Account shall equal the Accrued Payment Obligation (as defined below) related to all Senior Bonds and Parity Obligations;

second, to the Senior Bonds Debt Service Reserve Account, the amount required to cause the amount on deposit therein to be equal to the Debt Service Reserve Requirement related to the Senior Bonds, which is equal to 50% of the average Accrued Payment Obligation of the Senior Bonds as of the first Business Day of each Bond Year for each of the five Bond Years following the year on which the deposit is being made;

third, if there are Subordinated Bonds outstanding, to the Subordinated Bonds Debt Service Account, allocated on a pro rata basis between the Principal Subaccount and the Interest Subaccount until the amount on deposit in the Subordinated Bonds Debt Service Account shall equal the Accrued Payment Obligation related to all Subordinated Bonds and Subordinate Obligations;

<u>fourth</u>, if there are Subordinated Bonds outstanding, to the Subordinated Bonds Debt Service Reserve Account, the amount required to cause the amount on deposit therein to be equal to the Debt Service Reserve Requirement related to the Subordinated Bonds, which is equal to 50% of the average Accrued Payment Obligation of the Subordinated Bonds for each of the five Bond Years following the year on which the deposit is being made;

fifth, to the payment of Operating Expenses, which include reasonable out-of-pocket expenses of the System related to the issuance of the Bonds (including, without limitation, the out-of pocket costs of preparation of accounting and other reports, costs of maintenance of the ratings on Bonds, and insurance premiums, deductibles and retention payments), legal fees, fees and expenses incurred for professional consultants and fiduciaries, and regularly scheduled fees payable under each Credit Facility and Liquidity Facility; and

sixth, to the General Reserve Account, all Employer Contributions remaining after the deposits required by subparagraphs first to fifth above have been made in full. A portion of the funds held in the General Reserve Account will be released to the System after the end of each Bond Year, free and clear of the lien of the Resolution and the Security Agreement, upon the satisfaction of the following conditions: (i) during the Bond Year, there has been no withdrawal from any Debt Service Reserve Account to fund the Debt Service Account for any Class of Bonds; (ii) the balance in the Debt Service Account for each Class of Bonds is not less than the amount required to pay in full the next principal and interest obligation due on each Class of Bonds; (iii) the balance in the Debt Service Reserve Account for each Class of Bonds is not less than the Debt Service Reserve Requirement for such Class of Bonds; (iv) there are no outstanding amounts due to the Fiscal Agent under the Resolution or any Supplemental Resolution; and (v) on the last Business Day of the Bond Year, the balance in the General Reserve Account is not less than ten percent (10%) of the next Bond Year's Accrued Payment Obligation (net of capitalized interest) for all Outstanding Bonds. (Only amounts in excess of this 10% may be released to the System.)

"Accrued Payment Obligation" shall mean, with respect to any Class of Bonds and the related Parity Obligations and Subordinate Obligations, and for any Bond Year, as of any date, the aggregate of the Principal Installments of and interest on such Bonds, and the principal and interest components of such related Parity Obligations and Subordinate Obligations, due and unpaid during such Bond Year (or, in the case of Debt Service Account deposits, for Bonds with scheduled payments due more frequently than semi-annually, the current Bond Year and the first three months of the following Bond Year, and for all other Bonds, the current Bond Year); *provided* that in the case of Bonds that are not fixed rate Bonds or Bonds that are not denominated in U.S. dollars, the interest shall be based on the Assumed Interest Rate. For purposes of this definition, principal, interest or other obligations for the payment of which the Fiscal Agent shall hold in escrow sufficient funds in a separate account (including the Capitalized Interest Account and any escrow for the payment of Bonds that are defeased as provided in this Resolution) shall not be taken into consideration.

Senior Bonds Debt Service Account. The Fiscal Agent shall pay out of the interest subaccount in the Senior Bonds Debt Service Account, to the Persons entitled thereto, (i) the interest on the Senior Bonds as and when due and payable, and (ii) the interest component of the Parity Obligations related to the Senior Bonds, at the times, in the manner and on the terms and conditions as determined by the System and set forth in written directions of the System to the Fiscal Agent. In addition, the Fiscal Agent shall pay out of the principal subaccount in the Senior Bonds Debt Service Account, to the Persons entitled thereto, (i) each Principal Installment due on the Senior Bonds (including the Redemption Price payable upon mandatory redemption out of Sinking Fund Installments) as and when due and payable, and (ii) the principal component of Parity Obligations related to the Senior Bonds, at the times, in the manner and on the other terms and conditions as determined by the System and set forth in written directions of the System to the Fiscal Agent.

In the event of the refunding of any Senior Bonds, the Fiscal Agent shall, upon the written direction of the System to the Fiscal Agent, withdraw from the Senior Bonds Debt Service Account all or any portion of the amounts accumulated therein with respect to the Senior Bonds to be refunded and deposit such amounts as provided in such written direction; provided, however, that such withdrawal shall not be made unless immediately thereafter the Senior Bonds being refunded shall be deemed to have been paid.

Senior Bonds Debt Service Reserve Account. At the time any Senior Bonds are delivered pursuant to the Resolution or any Supplemental Resolution, the System shall pay into the Senior Bonds Debt Service Reserve Account from the proceeds of the Senior Bonds or other available funds, an amount equal to the aggregate of the Debt Service Reserve Requirements established in the Resolution for the Outstanding Senior Bonds, after giving effect to any Senior Bonds Reserve Account Cash Equivalent, which is defined as a letter of credit, insurance policy, surety, guarantee or other security arrangement provided to the Fiscal Agent as a substitute for the deposit of cash and/or investment securities in the Debt Service Reserve Account, calculated immediately after the delivery of such Bonds. The Senior Bonds Debt Service Reserve Amount is equal to 50% of the average Accrued Payment Obligation (net of capitalized interest) of the Senior Bonds as of the first Business Day of each Bond Year for each of the five Bond Years following the year on which the deposit is being made.

Except as otherwise provided by any Supplemental Resolution, amounts on deposit in the Senior Bonds Debt Service Reserve Account shall be applied, to the extent other funds (including, but not limited to any amounts in the General Reserve Account) are not available therefor pursuant to the Resolution, to pay when due the Principal Installments and Redemption Price of and the interest on the Outstanding Senior Bonds and the principal and interest components of the Parity Obligations related to the Senior Bonds.

Subordinated Bonds Debt Service Account. In the event the System issues Subordinated Bonds, the Fiscal Agent shall pay out of the interest subaccount in the Subordinated Bonds Debt Service Account, to the Persons entitled thereto, (i) the interest on the Subordinated Bonds as and when due and payable, and (ii) the interest component of the Subordinate Obligations related to the Subordinated Bonds, at the times, in the manner and on the terms and conditions as determined by the System and set forth in written directions of the System to the Fiscal Agent. In addition, the Fiscal Agent shall pay out of the principal subaccount in the Subordinated Bonds Debt Service Account, to the Persons entitled thereto, (i) each Principal Installment due on the Subordinated Bonds (including the Redemption Price payable upon mandatory redemption out of Sinking Fund Installments) as and when due and payable, and (ii) the principal component of the Subordinate Obligations related to the Subordinated Bonds, at the times, in the manner and on the other terms and conditions as determined by the System and set forth in written directions of the System to the Fiscal Agent. Amounts in the Subordinated Bonds Debt Service Account are available to pay debt service on the Senior Bonds if funds in the Senior Bond Debt Service Account, the Senior Bonds Debt Service Reserve Account and the General Reserve Account are insufficient therefor.

In the event of the refunding of any Subordinated Bonds, the Fiscal Agent shall, upon the written direction of the System to the Fiscal Agent, withdraw from the Subordinated Bonds Debt Service Account all or any portion of the amounts accumulated therein with respect to the Subordinated Bonds to be refunded and deposit such amounts as provided in such written direction; provided, however, that such withdrawal shall not be made unless immediately thereafter the Subordinated Bonds being refunded shall be deemed to have been paid.

<u>Subordinated Bonds Debt Service Reserve Account.</u> At the time any Subordinated Bonds are delivered pursuant to the Resolution, the System shall pay into the Subordinated Bonds Debt Service Reserve Account from the proceeds of the Subordinated Bonds or other available funds, an amount equal to the aggregate of the Debt Service Reserve Requirements established in the Resolution for the Outstanding Subordinated Bonds, after giving effect to any Subordinated Bonds Reserve Account Cash Equivalent, which is defined as a letter of credit, insurance policy, surety, guaranty or other security arrangement provided to the Fiscal Agent as a substitute for the deposit of cash and/or Investment Securities in the Subordinated Bonds Debt Service Reserve Account. The Subordinated Bonds Debt Service Reserve Amount is equal to 50% of the average Accrued Payment Obligation (net of capitalized interest) of the Subordinated Bonds for each of the five Bond Years following the year in which the deposit is being made.

Except as otherwise provided by any Supplemental Resolution, amounts on deposit in the Subordinated Bonds Debt Service Reserve Account shall be applied, to the extent other funds (including, but not limited to any amounts in the General Reserve Account) are not available therefor pursuant to the Resolution, to pay when due the Principal Installments and Redemption Price of and the interest on the Outstanding Subordinated Bonds and the principal and interest components of the Subordinate Obligations related to the Subordinated Bonds.

Amounts in the Subordinated Bonds Debt Service Reserve Account are available to pay debt service on the Senior Bonds if funds in the Senior Bond Debt Service Account, the Senior Bond Debt Service Reserve Account and the General Reserve Account are insufficient therefor.

<u>General Reserve Account.</u> There shall be transferred from the Revenue Account, after all deposits to the Senior Bonds Debt Service Account, the Senior Bonds Debt Service Reserve Account, the Subordinated Bonds Debt Service Reserve Account

have been made and operating expenses have been paid to the Fiscal Agent, all excess moneys into the General Reserve Account.

Except as otherwise provided by any Supplemental Resolution, amounts on deposit in the General Reserve Account shall be applied, to the extent funds are not available therefor in the Debt Service Account or Debt Service Reserve Account of any particular class of Bonds, to pay when due the Principal Installments and Redemption Price of and the interest on the Outstanding Bonds of the related class and the principal and interest components of Parity Obligations related to that class of Bonds. Funds in the General Reserve Account may also be used to pay Subordinate Obligations.

#### **Covenants Concerning Employer Contributions**

In the Resolution, the System covenants that it will diligently take all action necessary to collect Employer Contributions when due and will pursue all remedies provided by the Act and other applicable law to collect Employer Contributions.

In order to reduce the risk of any adverse change to the Act, the Resolution contains the System's covenant to oppose any reduction in the Employer Contributions rate or any other change in the Act that would have a material adverse effect on Bondholders.

#### **Limitation on Issuance of Additional Senior Bonds**

The System may issue, from time to time, one or more Series of additional Senior Bonds, which are payable from and secured by the Pledged Property on a parity with the Series A Bonds, the Series B Bonds, the Series C Bonds and any additional Senior Bonds that may be subsequently issued, upon satisfaction of the requirements of the Resolution before such issuance. No additional Senior Bonds may be issued unless the Fiscal Agent receives (i) a report from a nationally recognized independent economic consultant, dated no earlier than 12 months from the date of issuance of the additional Bonds, identifying the projected Employers' Contributions for each Bond Year through the final Maturity of all outstanding Senior Bonds, including the Senior Bonds then proposed to be issued; and (ii) a certificate of an authorized officer of the System certifying that, after taking into consideration the issuance of the additional Senior Bonds proposed to be issued, the projected Employers' Contributions in every Bond Year are equal to or greater than 140% of the Accrued Payment Obligation due on the Senior Bonds, including such additional Senior Bonds, in such year.

#### **Limitation on Issuance of Additional Subordinated Bonds**

The System may issue, from time to time, one or more Series of Subordinated Bonds, which are payable from and secured by the Pledged Property on a subordinated basis with the Series A Bonds, the Series B Bonds, the Series C Bonds and any other Senior Bonds that may be subsequently issued, upon satisfaction of the requirements of the Resolution before such issuance. No Subordinated Bonds may be issued unless the Fiscal Agent receives (i) a report from an independent economic consultant, dated no earlier than 12 months from the date of issuance of the additional Bonds, identifying the projected Employers' Contributions for each Bond Year through the final Maturity all outstanding Bonds, including the Subordinated Bonds then proposed to be issued; and (ii) a certificate of an authorized officer of the System certifying that, after taking into consideration the issuance of the additional Subordinated Bonds proposed to be issued, the projected Employers' Contributions in every Bond Year are equal to or greater than 125% of the Accrued Payment Obligation due on all Bonds, including such additional Subordinated Bonds, in such year.

#### **Issuance of Additional Refunding Bonds**

The System may also issue additional Bonds without complying with the requirements described above to refund in whole or in part any Bonds outstanding under the Resolution provided that the System certifies that: (a) the annual principal and interest payments for all Senior and Subordinated Bonds outstanding immediately after the issuance of such proposed refunding Bonds and the refunding of the refunded Bonds for the current and each future fiscal year, separately calculated for the Senior Bonds and the Subordinated Bonds, is no greater than (b) the annual principal and interest payments for all Senior and Subordinated Bonds outstanding immediately prior to such issuance during the same fiscal years, separately calculated for the Senior Bonds and the Subordinated Bonds.

#### **Issuance of Derivative Instruments**

The System may enter into swap agreements and other derivative instruments on a parity with the Bonds for the purpose of hedging its exposure to interest rates and exchange rates and managing the relationship between Employer Contributions and debt service on the Bonds.

#### **RATINGS**

The Series C Bonds have received a rating of "Baa3" on the U.S. Municipal Scale and "A1" on the Global Scale from Moody's Investors Services Inc., a U.S. public finance rating of "BBB-" from Standard & Poor's Rating Services, and a U.S. public finance rating of "BBB-" from Fitch Ratings Services. According to Moody's, its municipal ratings measure the intrinsic ability and willingness of an entity to pay its debt service. Moody's global scale ratings, on the other hand, measure "expected loss," defined as the probability of default times the amount of the loss upon default. Fitch's ratings on U.S. public finance debt securities measure credit quality relative to other U.S. public finance debt securities. According to Fitch, loss rates of most Fitch-rated U.S. public finance debt securities have historically been significantly lower, and are expected to continue to be significantly lower, than other debt instruments rated comparably by Fitch on its international ratings scale.

The ratings reflect only the respective opinions of such rating agencies. Any explanation of the significance of such ratings must be obtained from the respective rating agency. There is no assurance that the ratings will continue for any given period of time or will not be revised downward or withdrawn entirely by any or all of such rating agencies. Any such downward revision or withdrawal of the ratings could have an adverse effect on the market prices of the Series C Bonds.

#### TAX MATTERS

The following is a summary of the opinion of Bond Counsel regarding certain Puerto Rico tax and United States Federal income tax consequences of the ownership of the Series C Bonds. This section does not purport to cover all of the Puerto Rico tax and United States federal income tax consequences arising from the purchase and ownership of the Series C Bonds, and is based upon laws and regulations now in effect and is subject to change. You should consult your independent tax advisor as to the application to your particular situation of the tax discussion set forth below.

The discussion in connection with the Puerto Rico tax considerations is based on the current provisions of the Puerto Rico Internal Revenue Code of 1994, as amended (the "P.R. Code"), and the regulations promulgated or applicable thereunder (the "P.R. Code Regulations") issued by the Treasury Department of Puerto Rico (the "Treasury Department"); the Puerto Rico Municipal Property Tax Act of 1991, as amended (the "MPTA") and the regulations promulgated thereunder; the Municipal License Tax

Act, as amended (the "MLTA") and the regulations promulgated thereunder; and certain industrial and incentive tax acts described below. The U. S. federal income tax discussion is based on the current provisions of the United States Internal Revenue Code of 1986, as amended (the "Code") and the regulations promulgated thereunder (the "Code Regulations").

This discussion deals only with Series C Bonds held by original investors as capital assets within the meaning of Section 1121 of the P.R. Code and Section 1221 of the Code.

ALL PROSPECTIVE INVESTORS ARE ENCOURAGED TO CONSULT THEIR TAX ADVISORS REGARDING THE PUERTO RICO TAX CONSEQUENCES AND FEDERAL INCOME TAX CONSEQUENCES OF PURCHASING, OWNING AND DISPOSING OF THE SERIES C BONDS IN LIGHT OF THEIR PARTICULAR CIRCUMSTANCES, AS WELL AS THE EFFECT OF ANY FOREIGN, STATE, LOCAL OR OTHER LAWS.

The existing provisions of the statutes, regulations, judicial decisions, and administrative pronouncements, on which this summary is based, are subject to change (even with retroactive effect) and could affect the continued validity of this summary. An opinion of counsel represents only such counsel's best legal judgment and is not binding on the Puerto Rico Treasury Department, any municipality or agency of Puerto Rico, the United States Internal Revenue Service or the courts. Accordingly, there can be no assurance that the opinions set forth herein, if challenged, would be sustained.

#### **Puerto Rico Taxation**

In the opinion of Bond Counsel, based on the laws of Puerto Rico now in force:

- 1. Interest on the Series C Bonds is excluded from gross income and exempt from Puerto Rico income and withholding taxes, including the alternative minimum tax imposed by Section 1017 of the P. R. Code;
- 2. The Series C Bonds are exempt from property taxes imposed by the MPTA, and interest thereon is exempt from the municipal license tax imposed by the MLTA;
- 3. The transfer of the Series C Bonds by (i) gift will not be subject to gift tax under the P.R. Code in the case of donors who are residents of the Commonwealth at the time the gift is made and (ii) death will not be subject to estate tax under the P.R. Code in the case of a decedent who at the time of death was (x) a resident of Puerto Rico and (y) a United States citizen who acquired such citizenship solely by reason of birth or residence in Puerto Rico;
- 4. Gain recognized from the sale or exchange of a Series C Bond will be subject to income tax under the P.R. Code for taxpayers subject to Puerto Rico income tax on such gains, including individuals residing in Puerto Rico and corporations and partnerships organized under the laws of the Commonwealth;
- 5. The Series C Bonds will be considered an obligation of an instrumentality of Puerto Rico for purposes of (i) the non-recognition of gain rules of Section 1112(f)(2)(A) of the P.R. Code applicable to certain involuntary conversions; and (ii) the exemption from the surtax imposed by Section 1102 of the P.R. Code available to corporations and partnerships that have a certain percentage of their net income invested in obligations of instrumentalities of Puerto Rico and certain other investments; and

6. Interest on the Series C Bonds constitutes "industrial development income" under Section 2(j) of the Puerto Rico Industrial Incentives Act of 1963, the Puerto Rico Industrial Incentives Act of 1978, the Puerto Rico Tax Incentives Act of 1987, and the Puerto Rico Tax Incentives Act of 1998, each as amended (collectively, the "Acts"), when received by a holder of a grant of tax exemption issued under any of the Acts that acquired the Series C Bonds with "eligible funds," as such term is defined in the respective Acts.

The P.R. Code does not provide rules with respect to the treatment of the excess, if any, of the amount due at maturity of a Series C Bond over its initial offering price (the "Accretion Amount"). Under the current administrative practice followed by the Treasury Department, the Accretion Amount is treated as interest.

Prospective owners of the Series C Bonds, including but not limited to financial institutions, should be aware that ownership of the Series C Bonds may result in having a portion of their interest and other expenses attributable to interest on the Series C Bonds disallowed as deductions for purposes of computing the regular tax and the alternative minimum tax for Puerto Rico income tax purposes.

#### **United States Federal Taxation**

Disclosure pursuant to U. S. Internal Revenue Service Circular No. 230: This tax discussion is not intended or written to be used, and cannot be used by any taxpayer, for purposes of avoiding penalties that may be imposed on the taxpayer by the Internal Revenue Service. This tax discussion was written in connection with the promotion or marketing of the Series C Bonds. Each prospective purchaser of the Series C Bonds should seek tax advice from an independent tax advisor based on its particular circumstances.

Except as specifically provided below with respect to Puerto Rico Corporations (as such term is defined below), the following discussion is limited to U.S. federal income tax consequences of the ownership and disposition of the Series C Bonds by Puerto Rico Corporations, Puerto Rico Holders, and U.S. Holders, as such terms are defined below, who purchase the Series C Bonds upon initial issuance.

As used herein, the term "U.S. Holder" means a beneficial owner of Series C Bonds that is, for United States federal income tax purposes:

- a citizen or resident of the United States;
- a corporation organized in the Unites States or under the laws of a state of the United States:
- a corporation organized under the laws of the United States;
- an estate, the income of which is subject to United States federal income taxation regardless of its source; or
- a trust, if a court within the United States is able to exercise primary supervision over its administration and one or more United States citizens or residents, or a corporation or partnership organized under the laws of the United States, or any of its states has the authority to control all substantial decisions of the trust, or a trust that was in existence on August 20, 1996 and validly elected to be treated as a domestic trust.

The discussion does not address all tax consequences that may be applicable to a Puerto Rico Corporation, a Puerto Rico Holder and a U.S. Holder (including alternative minimum tax consequences, if any) that is a beneficial owner of Series C Bonds nor does it address the tax consequences to:

- persons that are not Puerto Rico Corporations, Puerto Rico Holders or U.S. Holders;
- persons to whom special treatment may be applied under United States federal income tax law, such as banks, insurance companies, thrift institutions, regulated investment companies, real estate investment trusts, tax-exempt organizations, traders in securities that elect to mark to market and dealers in securities or currencies;
- persons that will hold Series C Bonds as part of a position in a "straddle" or as part of a "hedging," "conversion" or other integrated investment transaction for United States federal income tax purposes;
- persons whose functional currency is not the United States dollar; or
- persons that do not hold Series C Bonds as capital assets.

The term "U.S. Holder" does not include a Puerto Rico Holder or a Puerto Rico Corporation. As used herein, the term "Puerto Rico Holder" means a Puerto Rico individual that is a bona fide resident of Puerto Rico during the entire taxable year within the meaning of Section 937 of the Code and the regulations thereunder, including the year in which the Series C Bonds are acquired by such individual. The term "Puerto Rico Corporations" means corporations organized under the laws of Puerto Rico.

This summary also does not address the consequences to holders of the Series C Bonds under state, local or foreign tax laws.

#### **Puerto Rico Holders and Puerto Rico Corporations**

Interest

Interest on the Series C Bonds is not excludable from the gross income of the recipient thereof for Federal income tax purposes under Section 103(a) of the Code.

Interest on the Series C Bonds received by, or "original issue discount" (within the meaning of the Code) accrued to, a Puerto Rico Holder during the entire taxable year in which such interest is received or "original issue discount" is accrued will constitute gross income from sources within Puerto Rico and, therefore, is excludable from gross income for purposes of the Code pursuant to Section 933(1) thereof.

Interest on the Series C Bonds received by, or original issue discount accrued to a Puerto Rico Corporation, is not subject to income taxation under the Code provided such interest or original issue discount is not effectively connected, or treated as effectively connected, with or attributable to the conduct of a trade or business within the United States by such corporation.

Prospective owners of the Series C Bonds should also be aware that the Code provides special rules for the taxation of shareholders of foreign corporations that qualify as "controlled foreign corporations," "personal holding companies," or "passive foreign investment companies," as such terms are defined by the Code.

Sale or other disposition of the Series C Bonds

In general, pursuant to the provisions of Section 1.937-2 of the Regulations issued under the Code, the source of the income from the sale of personal property by a bona fide resident of Puerto Rico within the meaning of Section 937 of the Code shall be determined under the rules of Section 865 of the

Code. Accordingly, the gain recognized on the sale or exchange of the Series C Bonds (excluding "original issue discount" under the Code as of the date of the sale or exchange) by a Puerto Rico Holder during the entire taxable year in which the source of the gain must be determined will constitute Puerto Rico source income and, therefore, qualify for exclusion under Section 933(1) of the Code.

A Puerto Rico Corporation generally will not be subject to income or withholding tax under the Code on a gain realized on the sale or exchange of Bonds, unless the gain is effectively connected with the conduct by the Puerto Rico Corporation of a trade or business in the United States and other requirements are satisfied.

Gift and Estate Taxes

The transfer of the Series C Bonds by death or gift will not be subject to estate or gift tax under the Code in the case of decedents or donors who, at the time of death or gift, are (i) residents of Puerto Rico and (ii) (x) United States citizens that acquired such citizenship solely by reason of birth or residence in Puerto Rico or (y) not United States citizens.

#### U. S. Holders

Interest

Interest on the Series C Bonds is not excludable from the gross income of U.S. Holders for federal income tax purposes under Section 103(a) of the Code. In general, interest on the Series C Bonds is included in gross income for Federal income tax purposes according to the accounting method of the holder of the Series C Bonds.

Original Issue Discount. The following summary is a general discussion of the U.S. federal income tax consequences to U.S. Holders of the purchase, ownership and disposition of Series C Bonds issued with OID ("Discount Bonds"). The following summary is based upon final Treasury Regulations (the "OID Regulations") released by the IRS under the OID provisions of the Code.

For U.S. federal income tax purposes, OID is the excess of the stated redemption price at maturity of a Series C Bond over its issue price, if such excess equals or exceeds a de minimis amount (generally 1/4 of 1% of the Series C Bond's stated redemption price at maturity multiplied by the number of complete years to its maturity from its issue date). The issue price of each Series C Bond in an issue of Series C Bonds equals the first price at which a substantial amount of such Series C Bonds has been sold (ignoring sales to bond houses, brokers or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). The stated redemption price at maturity of a Series C Bond is the sum of all payments provided by the Series C Bond other than "qualified stated interest" payments. The term "qualified stated interest" generally means stated interest that is unconditionally payable in cash or property (other than debt instruments of the issuer) at least annually at a single fixed rate. In general, if the excess of a Series C Bond's stated redemption price at maturity over its issue price is less than .25 percent of the Series C Bond's stated redemption price at maturity multiplied by the number of complete years to its maturity (the "de minimis amount"), then such excess, if any, constitutes de minimis OID, and the Series C Bond is not treated as being issued with OID and all payments of stated interest (including stated interest that would otherwise be characterized as OID) are treated as qualified stated interest, as described below. However, under the OID Regulations, if a Series C Bond bears interest for one or more accrual periods at a rate below the rate applicable for the remaining term of such Series C Bond (e.g., Bonds with teaser rates or interest holidays), and if the greater of either the resulting foregone interest on such Series C Bond or any "true" discount on such Series C Bond (i.e., the excess of

the Bond's stated principal amount over its issue price) equals or exceeds a specified *de minimis* amount, then the stated interest on the Series C Bond would be treated as OID rather than qualified stated interest.

Payments of qualified stated interest on a Series C Bond are taxable to a U.S. Holder as ordinary interest income at the time such payments are accrued or are received (in accordance with the U.S. Holder's regular method of tax accounting). A U.S. Holder of a Discount Bond must include OID in income as ordinary interest for U.S. federal income tax purposes as it accrues under a constant yield method in advance of receipt of the cash payments attributable to such income, regardless of such U.S. Holder's regular method of tax accounting. In general, the amount of OID included in income by the initial U.S. Holder of a Discount Bond is the sum of the daily portions of OID with respect to such Discount Bond for each day during the taxable year (or portion of the taxable year) on which such U.S. Holder held such Discount Bond. The "daily portion" of OID on any Discount Bond is determined by allocating to each day in any accrual period a ratable portion of the OID allocable to that accrual period. An "accrual period" may be of any length and the accrual periods may vary in length over the term of the Discount Bond, provided that each accrual period is no longer than one year and each scheduled payment of principal or interest occurs either on the final day of an accrual period or on the first day of an accrual period. The amount of OID allocable to each accrual period is generally equal to the difference between (i) the product of the Discount Bond's adjusted issue price at the beginning of such accrual period and its vield to maturity (determined on the basis of compounding at the close of each accrual period and appropriately adjusted to take into account the length of the particular accrual period) and (ii) the amount of any qualified stated interest payments allocable to such accrual period. The "adjusted issue price" of a Discount Bond at the beginning of any accrual period is the sum of the issue price of the Discount Bond plus the amount of OID allocable to all prior accrual periods minus the amount of any prior payments on the Discount Bond that were not qualified stated interest payments. Under these rules, U.S. Holders generally will have to include in income increasingly greater amounts of OID in successive accrual periods.

A U.S. Holder that purchases a Discount Bond for an amount that is greater than its adjusted issue price as of the purchase date and less than or equal to the sum of all amounts payable on the Discount Bond after the purchase date, other than payments of qualified stated interest, will be considered to have purchased the Discount Bond at an "acquisition premium." Under the acquisition premium rules, the amount of OID which such U.S. Holder must include in its gross income with respect to such Discount Bond for any taxable year (or portion thereof in which the U.S. Holder holds the Discount Bond) will be reduced (but not below zero) by the portion of the acquisition premium properly allocable to the period.

The Series C Bonds are redeemable at the option of the System prior to their stated maturity (a "call option"). Series C Bonds containing such features may be subject to rules that differ from the general rules discussed above. Investors intending to purchase Series C Bonds with such features should consult their own tax advisors, since the OID consequences will depend, in part, on the particular terms and features of the purchased Series C Bonds.

U.S. Holders may generally, upon election, include in income all interest (including stated interest, acquisition discount, OID, *de minimis* OID, market discount, *de minimis* market discount, and unstated interest, as adjusted by any amortizable bond premium or acquisition premium) that accrues on a debt instrument by using the constant yield method applicable to OID, subject to certain limitations and exceptions.

*Market Discount.* If a U.S. Holder purchases a Series C Bond, other than a Discount Bond, for an amount that is less than its issue price or, in the case of a Discount Bond, for an amount that is less than its adjusted issue price as of the purchase date, such U.S. Holder will be treated as having purchased such

Series C Bond at a "market discount," unless the amount of such market discount is less than a specified *de minimis* amount.

Under the market discount rules, a U.S. Holder will be required to treat any partial principal payment (or, in the case of a Discount Bond, any payment that does not constitute qualified stated interest) on, or any gain realized on the sale, exchange, redemption, retirement or other disposition of, a Series C Bond as ordinary income to the extent of the lesser of (i) the amount of such payment or realized gain or (ii) the market discount which has not previously been included in income and is treated as having accrued on such Series C Bond at the time of such payment or disposition. Market discount will be considered to accrue ratably during the period from the date of acquisition to the maturity date of the Series C Bond, unless the U.S. Holder elects to accrue market discount on the basis of semiannual compounding.

A U.S. Holder may be required to defer the deduction of all or a portion of the interest paid or accrued on any indebtedness incurred or maintained to purchase or carry a Series C Bond with market discount until the maturity of the Series C Bond or certain earlier dispositions, because a current deduction is only allowed to the extent the interest expense exceeds an allocable portion of market discount. A U.S. Holder may elect to include market discount in income currently as it accrues (on either a ratable or semiannual compounding basis), in which case the rules described above regarding the treatment as ordinary income of gain upon the disposition of the Series C Bond and upon the receipt of certain cash payments and regarding the deferral of interest deductions will not apply. Generally, such currently included market discount is treated as ordinary interest for U.S. federal income tax purposes. Such an election will apply to all debt instruments acquired by the U.S. Holder on or after the first day of the first taxable year to which such election applies and may be revoked only with the consent of the IRS.

Premium. If a U.S. Holder purchases a Series C Bond for an amount that is greater than the sum of all amounts payable on the Series C Bonds after the purchase date other than payments of qualified stated interest, such U.S. Holder will be considered to have purchased the Series C Bond with "amortizable bond premium" equal in amount to such excess. A U.S. Holder may elect to amortize such premium using a constant yield method over the remaining term of the Series C Bond and may offset interest otherwise required to be included in respect of the Series C Bond during any taxable year by the amortized amount of such excess for the taxable year. However, if the Series C Bond may be optionally redeemed after the U.S. Holder acquires it at a price in excess of its stated redemption price at maturity, special rules would apply which could result in a deferral of the amortization of some bond premium until later in the term of the Series C Bond. Any election to amortize bond premium applies to all taxable debt instruments acquired by the U.S. Holder on or after the first day of the first taxable year to which such election applies and may be revoked only with the consent of the IRS.

Disposition of a Series C Bond. Except as discussed above, upon the sale, exchange, redemption, retirement or other disposition of a Series C Bond, a U.S. Holder generally will recognize taxable gain or loss equal to the difference between the amount realized on the sale, exchange, redemption, retirement, or other disposition (other than amounts representing accrued and unpaid interest) and such U.S. Holder's adjusted tax basis in the Series C Bond. A U.S. Holder's adjusted tax basis in a Series C Bond generally will equal such U.S. Holder's initial investment in the Series C Bond increased by any OID included in income (and accrued market discount, if any, if the U.S. Holder has included such market discount in income) and decreased by the amount of any payments, other than qualified stated interest payments, received and amortizable bond premium taken with respect to such Series C Bond. Such gain or loss generally will be long-term capital gain or loss if the Series C Bond had been held at the time of disposition for more than one year.

Defeasance. U.S. Holders of the Series C Bonds should be aware that, for federal income tax purposes, the deposit of moneys or securities with the Fiscal Agent in such amount and manner as to cause the Series C Bonds to be deemed to be no longer outstanding under the Indenture (a "defeasance"), could result in a deemed exchange under Section 1001 of the Code and a recognition by a U.S. Holder of a Series C Bond of taxable income or loss, without any corresponding receipt of moneys. In addition, for federal income tax purposes, the character and timing of receipt of payments on the Series C Bonds subsequent to any such defeasance could also be affected. Upon such a defeasance, the System will provide to the owners of the Series C Bonds information about the defeasance necessary to enable such owners of the Series C Bonds information about the defeasance. U.S. Holders of the Series C Bonds are advised to consult with their own tax advisors regarding the consequences of a defeasance for federal income tax purposes, and for state and local tax purposes.

Backup Withholding and Information Reporting. In general, information reporting requirements will apply to non-corporate U.S. Holders of Series C Bonds with respect to payments within the United States of the principal of and interest on the Series C Bonds and proceeds of sale of such Series C Bonds before maturity. Backup withholding will apply to such payments unless the U.S. Holder: (i) is a corporation or other exempt recipient and, when required, demonstrates that fact; or (ii) provides a correct taxpayer identification number, certifies under penalties of perjury when required that such U.S. Holder is not subject to backup withholding and has not been notified by the IRS that it has failed to report all interest and dividends required to be shown on its United States federal income tax returns.

In addition, upon the sale of a Series C Bond to (or through) a broker, the broker must report the sale and withhold on the entire purchase price, unless either (i) the broker determines that the seller is a corporation or other exempt recipient or (ii) the seller certifies that such seller is a non-U.S. Holder (and certain other conditions are met). Certification of the registered owner's non-U.S. status would be made normally on an IRS Form W-8BEN under penalties of perjury, although in certain cases it may be possible to submit other documentary evidence.

Any amounts withheld under the backup withholding rules from a payment to a beneficial owner would be allowed as a refund or a credit against such beneficial owner's U.S. federal income tax provided the required information is furnished to the IRS.

#### **Other Taxes**

Bond Counsel will not opine as to the tax consequences of the ownership and disposition of the Series C Bonds under the law of any state or other jurisdiction, and a purchaser of the Series C Bonds must consult his, her or its tax advisor as to such tax consequences.

#### **ERISA CONSIDERATIONS**

The Employees Retirement Income Security Act of 1974, as amended ("ERISA"), and Section 4975 of the Code generally prohibit certain transactions between an "employee benefit plan" as defined in and subject to ERISA, a "plan" (such as a tax-qualified retirement plan or an individual retirement account or an individual retirement annuity) as defined in and subject to Section 4975(e)(1) of the Code, certain entities deemed to be holding the assets of such an "employee benefit plan" or "plan" (collectively, "Plans") and persons who, with respect to a Plan, are fiduciaries or other "parties in interest" within the meaning of ERISA or "disqualified persons" within the meaning of the Code. All fiduciaries of Plans, in consultation with their advisors, should carefully consider the impact of ERISA and the Code on an investment in any Series C Bonds.

#### **LEGAL MATTERS**

The form of opinion of Fiddler González & Rodríguez, P.S.C., San Juan, Puerto Rico, Bond Counsel, is set forth in Appendix VII to this Official Statement. Certain legal matters will be passed upon for the Underwriters by Sidley Austin LLP, New York, New York, and O'Neill & Borges, San Juan, Puerto Rico.

#### LEGAL INVESTMENT

The Series C Bonds will be eligible for deposit by banks in the Commonwealth to secure public funds and will be approved investments for insurance companies to qualify them to do business in the Commonwealth, as required by law.

#### GOVERNMENT DEVELOPMENT BANK

As required by Act No. 272 of the Legislature of Puerto Rico, approved May 15, 1945, as amended, Government Development Bank for Puerto Rico ("Government Development Bank") has acted as financial advisor to the System in connection with the issuance of the Series C Bonds. As financial advisor, Government Development Bank participated in the selection of the Underwriters of the Series C Bonds. Certain of the Underwriters have been selected by Government Development Bank to serve from time to time as underwriters of its obligations and the obligations of the Commonwealth, its instrumentalities and public corporations. Certain of the Underwriters or their affiliates participate in other financial transactions with Government Development Bank.

#### **UNDERWRITING**

The Underwriters have jointly and severally agreed, subject to certain conditions, to purchase the Series C Bonds from the System at an aggregate discount of \$4,683,165.71 from the initial public offering prices of the Series C Bonds set forth or derived from information set forth on the inside cover page hereof. The obligations of the Underwriters are subject to certain conditions precedent set forth in the purchase contract with the System, and they will be obligated to purchase all the Series C Bonds if any Series C Bonds are purchased. The Series C Bonds may be offered and sold to certain dealers (including dealers depositing Series C Bonds into investment trusts) and institutional purchasers at prices lower than or yields higher than such public offering prices and yields, and such offering prices may be changed, from time to time, by the Underwriters. The System has agreed to indemnify the Underwriters against certain liabilities, including liabilities under the Federal securities laws.

#### CONTINUING DISCLOSURE

In order to assist the Underwriters in complying with the requirements of Rule 15c2-12, as amended (the "Rule"), promulgated by the Securities and Exchange Commission ("SEC"), the System and the Commonwealth have agreed to the following:

- 1. Each of the System and the Commonwealth has agreed to file within 305 days after the end of each fiscal year, beginning with its fiscal year ending on June 30, 2008, with each NRMSIR and with any Commonwealth state information depository ("SID"), core financial information and operating data for the prior fiscal year, including (i) its audited financial statements, prepared in accordance with generally accepted accounting principles in effect from time to time, and (ii) material historical quantitative data (including financial information and operating data) on the System and the Commonwealth, as the case may be, and information as to revenues, expenditures, financial operations and indebtedness of the System and the Commonwealth, as the case may be, in each case, generally found or incorporated by reference in this Official Statement; and
- 2. The System has agreed to file, in a timely manner, with each NRMSIR or with the MSRB and with any SID, notice of any failure to comply with paragraph 1 above and of the occurrence of any of the following events with respect to the Series C Bonds if, in the judgment of the System or its agent, such event is material:
  - (a) principal and interest payment delinquencies; non-payment related defaults;
  - (b) unscheduled draws on debt service reserves reflecting financial difficulties;
  - (c) unscheduled draws on credit enhancements reflecting financial difficulties;
  - (d) substitution of credit or liquidity providers, or their failure to perform;
  - (e) adverse tax opinions or events affecting the tax-exempt status of the Series C Bonds:
  - (f) modifications to rights of the holders (including Beneficial Owners) of the Series C Bonds;
  - (g) bond calls;
  - (h) defeasances;
  - (i) release, substitution, or sale of property securing repayment of the Series C Bonds; and
  - (j) rating changes.

With respect to the following events:

Events (c) and (d). For a description of the Series C Bonds, see "The Series C Bonds." The System does not undertake to provide any notice with respect to credit enhancement added after the primary offering of the Series C Bonds, unless the System applies for or participates in obtaining the enhancement.

Event (e). For information on the tax status of the Series C Bonds, see "TAX MATTERS."

Event (g). The System does not undertake to provide the above-described event notice of a mandatory scheduled redemption, not otherwise contingent upon the occurrence of an event, if (i) the terms, dates and amounts of redemption are set forth in detail in this Official Statement under "The Series C Bonds-Redemption of the Bonds," (ii) the only open issue is which Series C Bonds will be redeemed in the case of a partial redemption, (iii) notice of redemption is given to the Bondholders as required under the terms of the Series C Bonds or the Resolution, and (iv) public notice of the redemption is given

pursuant to Securities Exchange Act of 1934 Release No. 3423856 of the SEC, even if the originally scheduled amounts are reduced by prior optional redemptions or purchases of Series C Bonds.

The Commonwealth expects to provide the information described in (1) above by delivering the first bond Official Statement of the Commonwealth or of any instrumentality of the Commonwealth that includes its financial statements for the preceding fiscal year and operating data generally containing the information set forth in the Commonwealth Report or, if no Official Statement is issued by the 305-day deadline, by delivering such Commonwealth Report and the Commonwealth Annual Financial Report by such deadline.

The Commonwealth has made similar continuing disclosure covenants in connection with prior bond issuances. During the prior five fiscal years, the Commonwealth has complied with these covenants in fiscal year 2004, but was unable to comply with these covenants in fiscal years 2003, 2005, 2006 and 2007. In 2003, the Commonwealth's audited financial statements were filed after the filing deadline because of delays in finalizing such financial statements resulting from the implementation of Governmental Accounting Standards Board Statement No. 34 ("GASB 34"). In 2005 and 2006, the Commonwealth's audited financial statements were filed after the filing deadline because various governmental agencies did not submit their audited financial statements to the central government's external auditors on time, thereby delaying the submission of the Commonwealth's audited financial statements for fiscal 2007 in June 2008. The Commonwealth was unable to file its 2007 financial statements prior to the filing deadline because various governmental agencies did not submit their audited financial statements to the central government's external auditors on time, thereby delaying the submission of the Commonwealth's audited financial statements.

As of the date of this Official Statement, there is no Commonwealth SID, and the nationally recognized municipal securities information repositories are: Bloomberg Municipal Repository, 100 Business Park Drive, Skillman, New Jersey 08558; Standard & Poor's, Securities Evaluation, Inc., 55 Water Street, 45<sup>th</sup> Floor, New York, New York 10041; FT Interactive Data, Attn. NRMSIR, 100 William Street, 15<sup>th</sup> Floor, New York, New York 10038; and DPC Data Inc., One Executive Drive, Fort Lee, New Jersey 07024.

The System may from time to time choose to provide notice of the occurrence of certain other events in addition to those listed above, whether or not such other events are material with respect to the Series C Bonds, but the System does not undertake to provide any such notice of the occurrence of any event, except those events, if material, listed above.

The Commonwealth and the System acknowledge that their respective undertakings pursuant to the Rule described above are intended to be for the benefit of the Beneficial Owners of the Series C Bonds, and shall be enforceable by any such Beneficial Owners; provided that the right to enforce the provisions of their respective undertakings shall be limited to a right to obtain specific enforcement of the System's or the Commonwealth's obligations hereunder.

No Beneficial Owner may institute any suit, action or proceeding at law or in equity ("Proceeding") for the enforcement of the foregoing covenants (the "Covenants") or for any remedy for breach thereof, unless such Beneficial Owner shall have filed with the System and the Commonwealth written notice of any request to cure such breach, and the System or the Commonwealth, as applicable, shall have refused to comply within a reasonable time. All Proceedings shall be instituted only in a Commonwealth court located in the Municipality of San Juan for the equal benefit of all Beneficial Owners of the outstanding Series C Bonds benefited by the Covenants, and no remedy shall be sought or

granted other than specific performance of any of the Covenants at issue. Moreover, Proceedings filed by Beneficial Owners against the Commonwealth may be subject to the sovereign immunity provisions of Sections 2 and 2A of Act No. 104, approved June 29, 1955, as amended, which governs the scope of legal actions against the Commonwealth, substantially limits the amount of monetary damages that may be awarded against the Commonwealth, and provides certain notice provisions, the failure to comply with which may further limit any recovery.

The Covenants may only be amended if:

- (1) the amendment is made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature, or status of the System or the Commonwealth, or type of business conducted; the Covenants, as amended, would have complied with the requirements of the Rule at the time of award of the Series C Bonds, after taking into account any amendments or change in circumstances; and the amendment does not materially impair the interest of Beneficial Owners, as determined by parties unaffiliated with the System or the Commonwealth; or
- (2) all or any part of the Rule, as interpreted by the staff of the SEC at the date of the adoption of such Rule, ceases to be in effect for any reason, and the System or the Commonwealth, as applicable, elects that the Covenants shall be deemed amended accordingly.

The System and the Commonwealth have further agreed that the annual financial information containing any amended operating data or financial information will explain, in narrative form, the reasons for the amendment and the impact of the change in the type of operating data or financial information being provided.

Any assertion of beneficial ownership must be filed, with full documentary support, as part of the written request described above.

#### **MISCELLANEOUS**

The foregoing references to and summaries of certain provisions of the Resolution, the various acts and the Series C Bonds are made subject to all the detailed provisions thereof, to which reference is hereby made for further information, and do not purport to be complete statements of any or all of such provisions.

The Government Development Bank has engaged Mesirow Financial, Inc., Chicago, Illinois, as Financial Advisor (the "Financial Advisor") in connection with the System's issuance and sale of the Series C Bonds. Under the terms of the engagement, the Financial Advisor is not obligated to undertake any independent verification of or assume any responsibility for the accuracy, completeness, or fairness of the information contained in this Official Statement.

There are appended to this Official Statement a table of the Government Employers with the highest covered payroll (Appendix I), the audited financial statements of the System for the fiscal years ended June 30, 2007 and 2006 together with the report of Parissi P.S.C., certified public accountants (Appendix II), additional information relating to the System (Appendix III), the Global Insight Report (Appendix IV), the General Resolution (Appendix V), the Supplemental Resolution (Appendix VI), the proposed form of opinion of Bond Counsel (Appendix VII); the summary of the book-entry system for the Series C Bonds (Appendix VIII); and the table of accreted values for the Capital Appreciation Bonds (Appendix IX).

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The financial statements of the System included in Appendix II and the Commonwealth Financial Statements incorporated by reference herein have been audited by Parissi P.S.C., San Juan, Puerto Rico, and KPMG LLP, San Juan, Puerto Rico ("KPMG"), respectively, as set forth in their respective reports therein. KPMG did not audit the financial statements of the Public Buildings Authority capital project fund or The Children's Trust special revenue fund (major funds), and certain activities, funds, and component units separately identified in KPMG's report. Those financial statements were audited by other auditors whose reports have been furnished to KPMG, and KPMG's opinion on the basic financial statements of the Commonwealth, insofar as it relates to the amounts included in the basic financial statements pertaining to such activities, funds, and component units, is based solely on the reports of the other auditors. KPMG's report contains an emphasis paragraph for the adoption of Government Accounting Standards Board (GASB) Statement No. 42, Accounting and Financial Reporting for Impairment of Capital Assets and for Insurance Recoveries, as of June 30, 2006.

The prospective financial information of the System included in this Official Statement has been prepared by, and is the responsibility of the management of the System. Parissi P.S.C. has neither examined nor compiled the prospective financial information, and accordingly, does not express an opinion or any other form of assurance with respect thereto. The Parissi P.S.C. report included in Appendix II to this Official Statement relates to the historical financial information of the System. Such report does not extend to any prospective financial information (whether or not contained or incorporated by reference in this Official Statement) and should not be read to do so. The information in the Commonwealth Report was supplied by certain officials of the Commonwealth or certain of its agencies or instrumentalities, in their respective official capacities, or was obtained from publications of the Commonwealth or certain of its agencies or instrumentalities, and is incorporated by reference in this Official Statement on the authority of such officials or the authority of such publications as public official documents, respectively. The information pertaining to DTC was supplied by DTC. The remaining information set forth in this Official Statement, except the information appearing in "UNDERWRITING," was supplied by the Acting Administrator of the System in her official capacity and is included in this Official Statement on her authority.

This Official Statement will be filed with each NRMSIR and with the Municipal Securities Rulemaking Board.

EMPLOYEES RETIREMENT SYSTEM OF THE GOVERNMENT OF THE COMMONWEALTH OF PUERTO RICO

By: /s/ Minia González-Álvarez
Acting Administrator

#### GOVERNMENT EMPLOYERS WITH HIGHEST COVERED PAYROLL

#### AS OF JUNE 30, 2007

ENTITY	CLASIFICATION	PARTICIPATING EMPLOYEES	ESTIMATED COVERED PAYROLL	ESTIMATED CONTRIBUTION	SHARE OF CONTRIBUTION	AVERAGE SALARY
PUBLIC SECURITY AND PROTECTION DEPARTMENT	Public Corp	21,318	\$567,547,269	\$52,639,900	14.0%	\$29,006
EDUCATION DEPARTMENT (NON-TEACHERS)	Cent. Govt	26,027	452,460,825	41,965,689	11.1%	18,250
CORRECTIONS AND REHABILITATION DEPARTMENT	Cent. Govt	8,678	208,876,776	19,373,456	5.1%	24,916
STATE INSURANCE FUND	Public Corp	4,129	204,904,404	19,314,619	5.1%	50,770
HEALTH DEPARTMENT	Cent. Govt	7,178	177,556,000	16,468,318	4.4%	25,963
ADMINISTRATION OF COURTS FACILITIES	Cent. Govt	4,971	124,113,141	11,511,506	3.1%	26,650
MUNICIPALITY OF SAN JUAN	Municipality	6,326	112,036,359	10,431,458	2.8%	20,513
TREASURY DEPARTMENT	Cent. Govt	3,606	101,201,170	9,386,412	2.5%	29,364
JUSTICE DEPARTMENT	Cent. Govt	2,519	93,712,588	8,691,820	2.3%	38,927
ACQUEDUCT AND SEWER AUTHORITY	Public Corp	5,413	82,971,767	7,712,459	2.0%	19,426
FAMILY AND CHILDREN ADMINISTRATION	Cent. Govt	3,288	85,125,215	7,895,366	2.1%	27,284
DEPT. OF TRANSPORTATION AND PUBLIC WORKS	Cent. Govt	3,372	72,833,556	6,755,346	1.8%	22,550
SOCIOECONOMIC DEVELOPMENT ADM.	Cent. Govt	3,509	71,284,598	6,611,675	1.8%	22,561
MENTAL HEALTH AND ANTI-ADDICTION SERVICES ADMINISTRATION	Cent. Govt	2,276	58,006,313	5,380,054	1.4%	26,773
FIRE DEPARTMENT	Cent. Govt	2,059	50,641,930	4,697,058	1.2%	25,164
DEPT. OF LABOR AND HUMAN RESOURCES	Cent. Govt	1,926	50,375,273	4,672,308	1.2%	27,592
PUBLIC BUILDINGS AUTHORITY	Public Corp	1,501	49,027,978	4,547,361	1.2%	35,794
HIGHWAY AND TRANSPORTATION AUTHORITY	Public Corp	2,513	48,498,304	4,498,221	1.2%	22,591
ADMINISTRATION OF JUVENILE INSTITUTIONS	Cent. Govt	1,898	44,272,734	4,106,276	1.1%	25,024
NATURAL RESOURCES ADMINISTRATION	Cent. Govt	1,733	40,195,461	3,728,127	1.0%	25,191
MUNICIPALITY OF PONCE	Municipality	2,339	39,879,742	3,698,848	1.0%	17,951
VOCATIONAL REHABILITATION ADMINISTRATION	Cent. Govt	1,253	35,406,241	3,283,939	0.9%	30,262
MUNICIPALITY OF CAROLINA	Municipality	1,695	33,873,402	3,148,442	0.8%	21,027
DEPARTMENT OF THE FAMILY	Cent. Govt	1,267	31,593,723	2,930,320	0.8%	26,880
AGROPECUARY SERVICES AND DEV. ADM.	Public Corp	1,324	28,566,185	2,655,422	0.7%	22,589
MUNICIPALITY OF GUAYNABO	Municipality	1,585	27,290,926	2,531,589	0.7%	18,091
MUNICIPALITY OF CAGUAS	Municipality	1,401	26,706,845	2,474,573	0.7%	20,346
METROPOLITAN BUS AUTHORITY	Public Corp	1,173	25,682,387	2,382,045	0.6%	23,589
OFFICE OF THE COMPTROLLER	Cent. Govt	673	25,346,517	2,350,902	0.6%	39,026
GOVERNMENT DEVELOPMENT BANK FOR PR	Public Corp	554	23,115,742	2,161,682	0.6%	43,241
HOUSING DEPARTMENT	Cent. Govt	957	22,197,322	2,058,801	0.5%	25,866
CHILD SUPPORT ADMINISTRATION	Cent. Govt	813	22,181,659	2,057,349	0.5%	28,023
MEDICAL EMERGENCIES	Cent. Govt	990	21,706,261	2,013,260	0.5%	23,655
RECREATION AND SPORTS DEPARTMENT	Cent. Govt	953	20,310,178	1,883,777	0.5%	22,681
AUTOMOBILES ACCIDENTS COMPENSATION ADM. COMMONWEALTH RETIREMENT SYSTEM	Public Corp	533	19,671,823	1,824,759	0.5%	39,390
ADMINISTRATION	Cent. Govt	578	18,137,596	1,682,260	0.4%	33,114
ENVIRONMENTAL QUALITY BOARD	Cent. Govt	536	17,905,239	1,660,714	0.4%	34,697
MUNICIPALITY OF TOA BAJA	Municipality	907	16,654,506	1,543,746	0.4%	19,222
NATIONAL PARKS COMPANY OF PR	Public Corp	749	16,389,465	1,525,412	0.4%	22,762
CARDIOVASCUAL CENTER CORPORATION OF P.R.	Public Corp.	669	16,345,308	1,516,027	0.4%	27,292
ADM. OF CHILDREN'S INTEGRAL DEVELOPMENT	Cent. Govt.	628	16,195,922	1,502,176	0.4%	27,712
MUNICIPALITY OF BAYAMON	Municipality	987	15,754,457	1,461,591	0.4%	17,037
COMMONWEALTH EMPLOYEES'ASSOCIATION	Public Corp.	469	15,682,042	1,455,980	0.4%	35,048
TOURISM COMPANY	Public Corp.	687	15,569,084	1,454,623	0.4%	32,215
Total for 80% Universe of Employers' Contributions		<u>137,960</u>	<u>\$3,247,804,233</u>	<u>\$301,645,666</u>	<u>80%</u>	
Total for Other 20% of Employers' Contributions		<u>38,877</u>	<u>\$ 776,429,194</u>	<u>\$ 72,748,423</u>	<u>20%</u>	
Total		<u>176,837</u>	\$4,024,233,427	<u>\$374,394,089</u>	100%	

Case:17-03283-LTS Doc#:7554-21 Filed:06/21/19 Entered:06/21/19 21:37:57 Desc: Exhibit U Page 67 of 217

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Appendix II

Employee's Retirement System of the Government of the Commonwealth of Puerto Rico (A Pension Trust Fund of the Commonwealth of Puerto Rico)

Basic Financial Statements for the Years Ended June 30, 2007 and 2006 and Independent Auditors' Report

# Employee's Retirement System of the Government of the Commonwealth of Puerto Rico (A Pension Trust Fund of the Commonwealth of Puerto Rico)

Basic Financial Statements for the Years Ended June 30, 2007 and 2006 and Independent Auditors' Report

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#### Independent Auditors' Report

To the Board of Trustees of the Employee's Retirement System of the Government of the Commonwealth of Puerto Rico San Juan, Puerto Rico

We have audited the accompanying statements of plan net assets of the Employee's Retirement System of the Government of the Commonwealth of Puerto Rico (the System) (a pension trust fund of the Commonwealth of Puerto Rico) as of June 30, 2007 and 2006 and the related statements of changes in plan net assets for the years then ended. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statements presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion the financial statements referred to above present fairly, in all material respects, the net assets of the System as of June 30, 2007 and 2006, and the changes in its net assets for the years then ended in conformity with accounting principles generally accepted in the United States of America.

The management's discussion and analysis on pages 2 through 10 is not a required part of the basic financial statements but is supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquires of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audits were conducted for the purpose of forming opinions on the financial statements of the System. The schedule of employers' contributions and funding progress for the year ended June 30, 2007 included on pages 38 through 40 are presented for purposes of additional analysis and is not a required part of the basic financial statements. These schedules have been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, are fairly stated in all material respects in

relation to the basic financial statements taken as a whole.

San Juan, Puerto Rico (La ) December 28, 2007

Stamp No. 2293925 was affixed to the original of this report. License No. 88 Exp. December 1, 2008.

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## Employee's Retirement System of the Government of the Commonwealth of Puerto Rico

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Management's Discussion and Analysis Years Ended June 30, 2007 and 2006

#### Introduction

The Employee's Retirement System of the Government of the Commonwealth of Puerto Rico (the System) administers retirement and other plan member benefits, such as personal, cultural and mortgages loans, occupational and non-occupational disability annuities and death benefits. The System is a pension trust fund of the Commonwealth of Puerto Rico. Pension trust resources are only held in trust to pay retirement benefits to plan members. The System presents the annual basic financial statements and provides a narrative discussion and analysis of the financial activities for the fiscal years ended June 30, 2007 and 2006. The financial performance of the System is discussed and analyzed within the context of the accompanying basic financial statements and disclosures.

#### Overview of the Basic Financial Statements

The Management's Discussion and Analysis introduces the System's basic financial statements. The basic financial statements include: (1) Statements of Plan Net Assets, (2) Statements of Changes in Plan Net Assets, and (3) Notes to the Basic Financial Statements. The System also includes additional information to supplement the Basic Financial Statements.

#### Statements of Plan Net Assets and Statements of Changes in Plan Net Assets

Both these statements provide information about the overall status of the System. The System uses accrual basic accounting to prepare its financial statements.

The Statements of Plan Net Assets includes all of the System's assets and liabilities, with the difference reported as net assets held in trust for pension benefits. Overtime, increases or decreases in net assets may serve as a useful indicator of whether the financial position of the System as a whole is improving or deteriorating.

The Statements of Changes in Plan Net Assets reports changes in the System's net assets held in trust for pension benefits during the year. All current year additions and deductions are included regardless of when cash is received or paid.

#### Notes to Basic Financial Statements

The notes to the basic financial statements provide additional information that is essential for an understanding of the data provided in the Statements of Plan Net Assets and Changes in Plan Net Assets.

#### Required Supplementary Information

The required supplementary information consists of two schedules and related notes concerning the funded status of the pension plan administered by the System

#### Financial Highlights

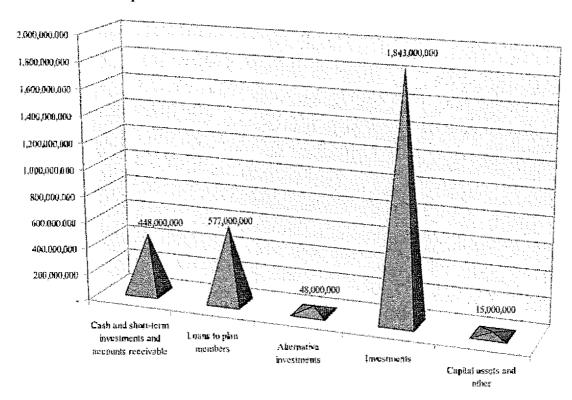
The System provides the retirement benefits to employees of the Commonwealth of Puerto Rico. The System has \$2,931 and \$2,776 million in total assets as of June 30, 2007 and 2006, respectively. This amount consists of the following:

## Employee's Retirement System of the Government of the Commonwealth of Puerto Rico

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Management's Discussion and Analysis Years Ended June 30, 2007 and 2006

- action between a retain of the feet of the contract of the con
  - \$448 million in cash and short-term investments and accounts receivable
  - \$577 million in loans to plan members
  - \$48 million in alternative investments
  - \$1.843 million in investments
  - \$15 million in copital assets and other



For fiscal year ended June 30, 2006, consists of the following:

- \$164 million in cash and short-term investments and accounts receivable
- \$529 million in loans to plan members
- \$42 million in alternative investments
- \$1,531 million in investments
- \$495 million in the investment in PRTA Holdings Preferred Stock
- \$15 million in capital assets and other

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Management's Discussion and Analysis Years Ended June 30, 2007 and 2006

The following provides a comparison of certain items within the financial statements:

		2007	2006	Total Dollar Change	Total Percentage Change
Assets		4007	(in thousands)	Change	Change
Cash and short-term investments			(III III Daniila)		
and total accounts receivable	\$	447,572	163,651	283,921	173 5%
Investments		1,890,567	2,068,653	(178,086)	-8 6%
Loans to plan members		577,314	528,552	48,762	9.2%
Capital assets and other		15,847	15,286	561	3.7%
Total assets	_	2,931,300	2,776,142	155,158	5.6%
Liabilities					
Accounts payable and accrued liabilities		10,125	9,246	879	9 5%
Insurance reserve for loans to plan members					
and investment settlements		11,086	148,686	(137,600)	-92.5%
Line of credit			60,000	(60,000)	-100 0%
Other liabilities	_	18,588	16,879	1,709	10.1%
Total liabilities	-	39,799	234,811	(195,012)	-83.1%
Total net assets held in trust for pension benefits	\$ =	2,891,501	2,541,331	350,170	13.8%
		2006	2005	Total Dollar Change	Total Percentage Change
Assets	•	2006	2005 (in thousands)		
Assets  Cash and short-term investments	**	2006		Dollar	Percentage
	S	163,651	(in thousands)	Dollar Change	Percentage Change
Cash and short-term investments	s	163,651 2,068,653	(in thousands) 127,640 1,893,896	Dollar Change 36,011 174,757	Percentage Change 28 2% 9.2%
Cash and short-term investments and total accounts receivable Investments Loans to plan members	S	163,651 2,068,653 528,552	(in thousands) 127,640 1,893,896 465,247	36,011 174,757 63,305	Percentage Change 28 2% 9.2% 13.6%
Cash and short-term investments and total accounts receivable Investments Loans to plan members Capital assets and other	S	163,651 2,068,653 528,552 15,286	(in thousands) 127,640 1,893,896 465,247 16,175	Jollar Change 36,011 174,757 63,305 (889)	Percentage Change 28 2% 9.2% 13.6% -5.5%
Cash and short-term investments and total accounts receivable Investments Loans to plan members	\$	163,651 2,068,653 528,552	(in thousands) 127,640 1,893,896 465,247	36,011 174,757 63,305	Percentage Change 28 2% 9.2% 13.6%
Cash and short-term investments and total accounts receivable Investments Loans to plan members Capital assets and other Total assets	S	163,651 2,068,653 528,552 15,286	(in thousands) 127,640 1,893,896 465,247 16,175	Jollar Change 36,011 174,757 63,305 (889)	Percentage Change 28 2% 9.2% 13.6% -5.5%
Cash and short-term investments and total accounts receivable Investments Loans to plan members Capital assets and other Total assets  Liabilities Accounts payable and accrued liabilities	S	163,651 2,068,653 528,552 15,286	(in thousands) 127,640 1,893,896 465,247 16,175	Jollar Change 36,011 174,757 63,305 (889)	Percentage Change 28 2% 9.2% 13.6% -5.5%
Cash and short-term investments and total accounts receivable Investments Loans to plan members Capital assets and other Total assets Liabilities	S	163,651 2,068,653 528,552 15,286 2,776,142	(in thousands)  127,640 1,893,896 465,247 16,175 2,502,958	J6,011 174,757 63,305 (889) 273,184	Percentage Change  28 2% 9.2% 13 6% -5.5% 10.9%
Cash and short-term investments and total accounts receivable Investments Loans to plan members Capital assets and other Total assets  Liabilities Accounts payable and accrued liabilities Insurance reserve for loans to plan members	S	163,651 2,068,653 528,552 15,286 2,776,142	(in thousands)  127,640 1,893,896 465,247 16,175 2,502,958	36,011 174,757 63,305 (889) 273,184	Percentage Change 28 2% 9.2% 13 6% -5.5% 10.9%
Cash and short-term investments and total accounts receivable Investments Loans to plan members Capital assets and other Total assets  Liabilities Accounts payable and accrued liabilities Insurance reserve for loans to plan members and investment settlements	S	163,651 2,068,653 528,552 15,286 2,776,142 9,246 148,686	(in thousands)  127,640 1,893,896 465,247 16,175 2,502,958	Jollar Change 36,011 174,757 63,305 (889) 273,184 (402) (11,759)	Percentage Change 28 2% 9.2% 13 6% -5.5% 10.9% -4 2% -7 3%
Cash and short-term investments and total accounts receivable Investments Loans to plan members Capital assets and other Total assets  Liabilities Accounts payable and accrued liabilities Insurance reserve for loans to plan members and investment settlements Line of credit	S	163,651 2,068,653 528,552 15,286 2,776,142 9,246 148,686 60,000	(in thousands)  127,640 1,893,896 465,247 16,175 2,502,958  9,648  160,445	36,011 174,757 63,305 (889) 273,184 (402) (11,759) 60,000	Percentage Change  28 2% 9.2% 13.6% -5.5% 10.9%  -4 2% -7 3% 100 0%
Cash and short-term investments and total accounts receivable Investments Loans to plan members Capital assets and other Total assets  Liabilities Accounts payable and accrued liabilities Insurance reserve for loans to plan members and investment settlements Line of credit Other liabilities	S	163,651 2,068,653 528,552 15,286 2,776,142 9,246 148,686 60,000 16,879	(in thousands)  127,640 1,893,896 465,247 16,175 2,502,958  9,648  160,445 4,994	Jollar Change 36,011 174,757 63,305 (889) 273,184 (402) (11,759) 60,000 11,885	Percentage Change  28 2% 9.2% 13.6% -5.5% 10.9%  -4.2% -7.3% 100.0% 238.0%

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Management's Discussion and Analysis Years Ended June 30, 2007 and 2006

			2007	2006	Total Dollar Change	Total Percentage Change
Additions		-		(in thousands)		
Contribution	ons:					
Emplo	•	S	374,394	382,877	(8,483)	-2.2%
	ipating employees		338,791	342,697	(3,906)	-1 1%
Other			69,097	15,495	53,602	345 9%
Investment	t income		433,970	292,816	141,154	48 2%
Other		***	36,872	39,954	(3,082)	<u>-7.7%</u>
	Total additions	-	1,253,124	1,073,839	179,285	16.7%
Deductions						
Retirement	t and other benefits		831,658	804,315	27,343	3.4%
Refunds of	f contributions		33,305	22,373	10,932	48.9%
General an	d administrative		29,207	28,534	673	2 4%
Other		_	8,784	5,157	3,627	70.3%
	Total deductions	-	902,954	860,379	42,575	4.9%
	Increase in net assets	S _	350,170	213,460	136,710	64.0%
				79-11/01/01/01/01/01/01/01/01/01/01/01/01/0	Annual Control of the	***************************************
				340000000000000000000000000000000000000	Total	Total
			<b>1</b> 00/	3005	Dollar	Percentage
A 44(4;		-	2006	2005		
Additions		-	2006	2005 (in thousands)	Dollar	Percentage
Contribution		-	**************************************	(in thousands)	Dollar Change	Percentage Change
Contribution Emplo	pyers	- s	382,877	(in thousands) 371,916	Dollar Change	Percentage Change 2 9%
Contributio Emplo Partic	oyers ipating employees	- S	382,877 342,697	(in thousands) 371,916 332,376	Dollar Change 10,961 10,321	Percentage Change 2 9% 3 1%
Contribution Emplo Partic Other	oyers ipating employees	<b>-</b> S	382,877 342,697 15,495	(in thousands)  371,916  332,376  2,907	Dollar Change 10,961 10,321 12,588	Percentage Change 2 9% 3.1% 433 0%
Contribution Emplo Partic Other Investment	oyers ipating employees	S	382,877 342,697 15,495 292,816	(in thousands)  371,916  332,376  2,907  251,922	Dollar Change 10,961 10,321 12,588 40,894	Percentage Change 2 9% 3 1% 433 0% 16 2%
Contribution Emplo Partic Other	oyers ipating employees	s -	382,877 342,697 15,495	(in thousands)  371,916  332,376  2,907	Dollar Change 10,961 10,321 12,588	Percentage Change 2 9% 3.1% 433 0%
Contribution Emplo Partic Other Investment Other	oyers ipating employees t income	S -	382,877 342,697 15,495 292,816 39,954	(in thousands)  371,916  332,376  2,907  251,922  22,656	Dollar Change 10,961 10,321 12,588 40,894 17,298	Percentage Change 2 9% 3.1% 433 0% 16 2% 76.4%
Contribution Emplo Partic Other Investment Other	oyers ipating employees t income Total additions	S -	382,877 342,697 15,495 292,816 39,954 1,073,839	(in thousands)  371,916 332,376 2,907 251,922 22,656 981,777	Dollar Change 10,961 10,321 12,588 40,894 17,298 92,062	Percentage Change 2 9% 3 1% 433 0% 16 2% 76.4% 9.4%
Contribution Emplo Partic Other Investment Other  Deductions Retirement	oyers ipating employees t income Total additions t and other benefits	S -	382,877 342,697 15,495 292,816 39,954 1,073,839	(in thousands)  371,916 332,376 2,907 251,922 22,656 981,777	Dollar Change 10,961 10,321 12,588 40,894 17,298 92,062	Percentage Change 2 9% 3 1% 433 0% 16 2% 76.4% 9.4%
Contribution Emplo Partic Other Investment Other  Deductions Refunds of	oyers ipating employees t income Total additions t and other benefits f contributions	\$ -	382,877 342,697 15,495 292,816 39,954 1,073,839 804,315 22,373	(in thousands)  371,916 332,376 2,907 251,922 22,656 981,777  739,439 19,681	Dollar Change 10,961 10,321 12,588 40,894 17,298 92,062 64,876 2,692	Percentage Change 2 9% 3.1% 433 0% 16 2% 76.4% 9.4% 8 8% 13.7%
Contribution Emplo Partic Other Investment Other  Deductions Refunds of General an	oyers ipating employees t income Total additions t and other benefits	\$	382,877 342,697 15,495 292,816 39,954 1,073,839 804,315 22,373 28,534	(in thousands)  371,916 332,376 2,907 251,922 22,656 981,777	Dollar Change 10,961 10,321 12,588 40,894 17,298 92,062 64,876 2,692 (7,694)	Percentage Change 2 9% 3.1% 433 0% 16 2% 76.4% 9.4% 8 8% 13 7% -21 2%
Contribution Emplo Partic Other Investment Other  Deductions Refunds of	oyers ipating employees t income Total additions t and other benefits f contributions	S	382,877 342,697 15,495 292,816 39,954 1,073,839 804,315 22,373 28,534 5,157	(in thousands)  371,916 332,376 2,907 251,922 22,656 981,777  739,439 19,681	Dollar Change 10,961 10,321 12,588 40,894 17,298 92,062 64,876 2,692 (7,694) 5,157	Percentage Change 2 9% 3 1% 433 0% 16 2% 76.4% 9.4% 8 8% 13 7% -21 2% 100.0%
Contribution Emplo Partic Other Investment Other  Deductions Refunds of General an	oyers ipating employees t income  Total additions t and other benefits f contributions ad administrative	S	382,877 342,697 15,495 292,816 39,954 1,073,839 804,315 22,373 28,534	(in thousands)  371,916 332,376 2,907 251,922 22,656 981,777  739,439 19,681 36,228	Dollar Change 10,961 10,321 12,588 40,894 17,298 92,062 64,876 2,692 (7,694)	Percentage Change 2 9% 3.1% 433 0% 16 2% 76.4% 9.4% 8 8% 13 7% -21 2%

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Management's Discussion and Analysis Years Ended June 30, 2007 and 2006

- The System assets exceeded liabilities by \$2,892 million (net assets) for the fiscal year reported compared to the prior year, for which assets exceeded liabilities by \$2,541 million.
- Based on the last actuarial valuation at June 30, 2005, the System funding ratio of the actuarial accrued liability is 19%.
- Loans to plan members amounted to \$577 million at June 30, 2007 compared to \$529 million at June 30, 2006.

The basic financial statement of the System for the fiscal year ended June 30, 2007 presents an increase in net assets of approximately \$350 million as compared to the prior fiscal year. This was mostly the result of an increase in cash and short-term investments of \$255 million, increase in the fair value of investments of \$317 million, increase in loans of \$49 million and in accounts receivable of \$29 million, the decrease in total liabilities of \$195 million due to the cancellation of certain agreements explained below, offset by the sale of the PRTA Holdings Preferred Stock investments of \$495 million.

The System's net assets held in trust for pension benefits include employer and employee contributions as well as investment income. For fiscal year 2007, the employer and plan member contributions increased by approximately \$41 million, from \$741 million during fiscal year 2006 to \$782 million during fiscal 2007, which includes Early Retirement of \$15 and \$69 million, respectively. The System recognized a net appreciation in the fair value of investments of \$364 and \$189 million for fiscal year 2007 and 2006, respectively.

Also the financial statement of the System for the fiscal year ended June 30, 2006 presents an increase in net assets as compared to the fiscal year ended June 30, 2005 of approximately \$213 million. This was mostly the result of an increase in the fair value of investments of \$165 million, increase in PRTA Holdings Preferred Stock investment and loans portfolio of \$72 million, increase in cash and short-term investments of \$12 million and increase in accounts receivable of \$24 million offset by an increase in liabilities of \$60 million.

For fiscal year 2006, the employer and employee contributions increased by approximately \$34 million, from \$707 during fiscal year 2005 to \$741 million during fiscal year 2006.

### Master Repurchase Agreement

The Board of Trustees approved on June 28, 2005 a Master Repurchase Agreement for the amount of \$150 million. As of June 30, 2007 the Repurchase Obligation was cancelled.

## Credit Agreement

On June 29, 2006, a financial institution (Santander Bank) approved a line of credit of \$112 million. The principal amount borrowed by the System was cancelled as of June 30, 2007.

### Investment in PRTA Holdings Preferred Stock

The sale on the investment in PRTA Holdings Preferred Stock took place in April 2007 in the amount of \$529 million and the interest income recognized thereon was \$5 million. These proceeds were used to

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Management's Discussion and Analysis Years Ended June 30, 2007 and 2006

cancel the Master Repurchase Agreement, the line of credit and to cover the overdraft at the Treasury Department.

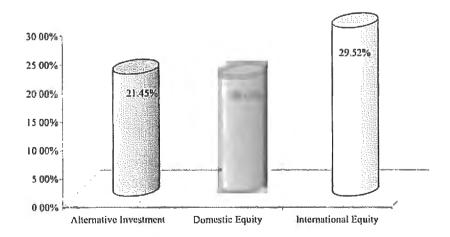
During the fiscal years ended June 30, 2007 and 2006, the System received \$9.9 million and \$45.7 million, respectively, in dividends from TELPRI.

## Financial Analysis of the System

Facing an unstable market, in 2001 management identified the need for a portfolio restructuring. The System's portfolio moved from a very aggressive allocation of 75% toward equities to a controlled allocation of a maximum of 65% in equities. To enhance the expected annual return, the strategy concentrated in the allocation of a 28% of the total portfolio to the plan members' loans program with only 7% assigned to a core fixed income strategy. Those loans actually provide a higher return and lower risk in comparison to bonds, mostly because the System has the ability to rise the interest rates charged, the repayment comes from payroll deductions and the loans are guaranteed by plan members' accumulated contributions.

The asset mix of the fund generated a fixed income of approximately 10.59% and 10.32% for the year ended June 30, 2007 and 2006, respectively. The new asset allocation is the one that fulfills the System's needs and since it is more adequately balanced, it provides protection in case of a market downturn. The performance of International Equity is 29.52%, Alternative Investment is 21.45% and Domestic Equity is 20.12% as shown in the following chart:

# EMPLOYEE'S RETIREMENT SYSTEM OF THE GOVERNMENT OF THE COMMONWEALTH OF PUERTO RICO Management's Discussion and Analysis June 30, 2007



(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Management's Discussion and Analysis Years Ended June 30, 2007 and 2006

For fiscal year ended June 30, 2006, the investment returns of International Equity was 27.67%, Alternative Investment 23.21% and Domestic Equity 9.75%

### Other Investments and Transactions

At June 30, 2007 and 2006, the System held approximately \$577 and \$528 million, respectively, in toans and interest receivable from plan members which represent 23% of the total investment portfolio. As of June 30, 2007 these loans consist of \$108 million in mortgage loans, \$440 million in personal loans, \$27 million in cultural loans, \$16 million in accrued interest receivable, and \$14 million in allowance for adjustment and losses in realization. For the fiscal year ended June 30, 2006 these loans consist of \$96 million in mortgage loans, \$405 million in personal loans, \$24 million in cultural loans, \$17 million in accrued interests receivable, and \$14 million in allowance for adjustment and losses in realization.

As of June 30, 2007 and 2006, the System has participation in Limited Partnership Investments for an approximate value of \$47.8 and \$41.6 million, respectively which represents 2% of the investment portfolio for each year. These investments had a gross return of 21.45% and 23.21% for fiscal year 2007 and 2006, respectively.

The System earns additional investment income by lending investment securities to brokers via its custodian's securities lending program. The brokers provide collateral to the System and generally used the borrowed security to cover short sales and failed trades. The cash collateral received from the brokers is invested in order to earn interest. For financial statements purposes, the amount of securities as of June 30, 2007 that was involved in the securities lending transactions was presented with the required disclosures, according to the current government accounting pronouncements. For the fiscal year 2007 and 2006, income from the custodian securities lending activity amounted to approximately \$144,000 and \$158,000, respectively.

### Funding Status

The System was created by Act 447 of May 15, 1951, and since its inception it lacked proper planning and the levels of contributions were relatively low (and still remains low in comparison to the level of benefits). Besides, all retirement systems in place before 1951 were merged into the System, which then had to absorb all their unfunded liabilities. Afterwards, in 1973, the benefits structure was enhanced however, without the appropriate increase in the contribution levels. As more people joined the government labor force and then retired under the new enhanced benefit structure, the gap between the assets available to pay benefits and the actuarial obligation started its steeping course.

In 1990, in an effort to withstand the increase in the unfunded liability, the benefit structure was modified, basically to decrease the benefits and to postpone the retirement age from 55 to 65 in order to provide a structure more affordable. Also, the level of contributions was raised and the Act 447 was amended to provide that any increase in benefits will require actuarial studies and must state the financing source.

Ten years later, the steeping course of the unfunded liability required further action. As a result, the defined benefit plan was closed to new plan members joining the System on or after January 1, 2000. To provide a retirement alternative, the Commonwealth created a defined contribution plan funded only by employee's contributions. The new plan is known as the Retirement Savings Account Program (System

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Monagement's Discussion and Analysis Years Ended June 30, 2007 and 2006

2000). Under System 2000, the employers' contributions continue at the same level as the defined benefit plan, but are being used to fund the accrued actuarial liability of the defined benefit plan that was closed. Also under System 2000, the disability benefits are to be provided through a private insurance long term disability program to those plan members that voluntarily elect to enroll in such program. On September 15, 2004, Act 296 was enacted to amend the dispositions on Act 305 regarding disbursements and the disability benefits program. After the amendment, any plan member that leaves public service may request that the balance in his/her savings account be transferred to a qualified retirement vehicle such as an individual retirement account or a qualified retirement plan in Puerto Rico. Act 296 also provides flexibility on the establishment of the disability program; but still, the employees must finance the program

Presently, the Employee's System consists of three different benefit structures, which are administrated according to their specifications in the Act. For all plan members in the defined benefit plan, the level of contributions established by law is 8.275% of the employee salary. Under System 2000, employee's contributions range from 8.275% to 10% of the salary, as specified by the employee. Under all structures, employers' contributions are stated by law at 9.275% of the employee salary.

On the other hand, the System's actuarial obligation continues its increasing trend as a result of the continuous increase in the pensioners' population and its longevity and the fact that incoming pensioners have higher saturies and consequently, they are entitled to even higher annuities. Since 1990, there have been no other increases in the employers or employees contributions to cope with those factors and therefore, the level of contributions remains low in comparison to the level of pension benefits.

Market events plus the continuous increase in the actuarial liability had a negative effect over the System's actuarial unfunded liability. Based on the last actuarial valuation at June 30, 2005, the System's funding ratio is 19%, the actuarial obligation is \$12,284 million, total actuarial value of plan assets amounted to \$2,328 million and the unfunded actuarial accrued liability is \$9,956 million

The bottom line is that the capital markets by themselves cannot solve the System's funding problem. Somehow capital contributions must be increased and/or the liabilities must be reduced. Management has come up with recommendations to improve the System's financial health. Among those stand out the increase in employee's and employer's contribution rates.

### Increase in Benefits for Retirees Established for 2007 and 2006

For the years 2007 and 2006, the Government of Puerto Rico granted several benefits to the System's retirees to help them cope with the increase in the cost of living, which consisted of:

- Increase in the minimum monthly pension benefit from \$300 to \$400, effective July 1, 2007.
- Increases of 3% in all pensions effective on July 1, 2007, but computed retroactively to January 1, 2007.
- Increase from \$500 to \$550 and to \$600 in the Christmas Bonus for the retiree, effective in December 2006 and 2007 respectively.

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Management's Discussion and Analysis Years Ended June 30, 2007 and 2006

Following the requirements established by Act 1 of February 16, 1990, these benefits are financed through legislative appropriations from the Commonwealth with respect to Central Government retirees and financed by the municipalities and public corporations with respect to their corresponding retirees.

### Capital Assets

The System's investment in capital assets as of June 30, 2007 and 2006 amounted to approximately \$8.5 and \$7.7 million, respectively, net of accumulated depreciation. Capital assets include land, building, construction in progress, equipment, furniture and vehicles. The building consists in the facilities in which the System has its operations.

During the year ended June 30, 2007 the System invested approximately \$1.4 million for construction and remodeling the building facilities. This construction activity was financed through the operational budget of the System. See note 8 for further information.

### Other Currently Known Facts

On February 27, 2007, the System's administration and the Government Development Bank for Puerto Rico, acting as the System's fiscal agent, presented to the Board of Trustees, a financial transaction for the issuance of pension funding bonds in order to reduce the System's unfunded actuarial accrued liability. The Board of Trustees authorized to continue the process for this transaction.

### Requests for Information

The financial report is designed to provide a general overview of the System's finances, comply with related laws and regulations, and demonstrate commitment to public accountability. Questions concerning any of the information provided in this report or requests for additional information should be addressed to the Commonwealth of Puerto Rico Government Employees and Judiciary Retirement Systems Administration, 437 Ponce de León Avenue, Hato Rey, Puerto Rico 00918.

\* \* \* \* \*

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Statements of Plan Net Assets June 30, 2007 and 2006

Assets		2007	2006
		(in thou	sands)
Cash and short-term investments			
Deposits at commercial banks	\$	41,365	27,849
Deposits with Government Development			
Bank of Puerto Rico:			
Unrestricted		26 <b>6</b> ,633	25,778
Restricted	****	2,310	2,156
Total cash and short-term investments		310,308	55,783
Investments:			
Bonds		149,639	154,825
Stocks		1,693,144	1,376,901
Private equity investments	•••	47,784	41,609
Total investments		1,890,567	1,573,335
Investment in PRTA Holdings, at			
appraised value			495,318
Total cash and investments		2,200,875	2,124,436
Loans and interest receivable from			
plan members, net of allowance for			
adjustments and losses in realization		577,314	528,552
Accounts receivable:			
Employers		117,420	63,571
Commonwealth of Puerto Rico		4,615	10,401
The Commonwealth of Puerto Rico			
Judiciary Retirement System		5,113	3,161
Investment sales		2,470	1,279
Accrued interest		3,119	2,385
Accrued dividend			23,720
Other		4,527	3,351
Total accounts receivable	_	137,264	107,868
Capital assets		8,476	7,694
Other assets	•	7,371	7,592
Total assets	\$	2,931,300	2,776,142

(Continued)

See accompanying notes to basic financial statements.

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Statements of Plan Net Assets June 30, 2007 and 2006

		2007	2006
Liabilities	2100	(in thou	sands)
Deposits with Treasury Department			
of the Commonwealth	\$	1,566	34.400da.
Securities sold under agreements			
to repurchase		W-444444	139,074
Line of credit			60,000
Funds of mortgage loans and guarantee insurance			
reserve for loans to plan members		8,914	8,433
Investment purchases		2,172	1,179
Accounts payable and accrued liabilities		10,125	9,246
Other liabilities		17,022	16,879
Total liabilities		39,799	234,811
Net assets held in trust for pension benefits	\$	2,891,501	2,541,331

(Concluded)

See accompanying notes to basic financial statements

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Statements of Changes in Plan Net Assets Years Ended June 30, 2007 and 2006

		2007	2006
	-dodožen	(in thou	isands)
Additions:			
Contributions:			
Employers	\$	374,394	382,877
Participating employees		338,791	342,697
Early retirement		69,097	15,495
Other special laws		17,000	16,684
Investment income:		799,282	757,753
Net appreciation of investments		364,185	189,513
Dividend income		14,494	49,938
Interest income		68,231	63,480
Microst moone	4000	446,910	302,939
Less: Investment expense		12,940	10,123
Net investment income	****	433,970	292,810
Insurance premiums on loans to plan members		2,441	14,492
Other income		17,431	8,771
Total additions	*****	1,253,124	1,073,839
Deductions:			
Annuities		800,786	772,647
Benefits under other special laws		17,000	16,684
Death benefits		13,872	14,984
Refunds of contributions:			
Employers		5,296	1,660
Participating employees		28,009	20,70
Insurance claims on loans to plan members		2,118	1,210
General and administrative		29,207	28,53
Other expenses	***	6,666	3,94
Total deductions		902,954	860,379
Net increase		350,170	213,460
Net assets held in trust for pension benefits			
Beginning of year	·	2,541,331	2,327,87
End of year	\$	2,891,501	2,541,33

See accompanying notes to basic financial statements.

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

#### 1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Employee's Retirement System of the Government of Commonwealth of Puerto Rico (the System) was created by Act No 447 on May 15, 1951. The System began operations on January 1, 1952, at which date, contributions by employers and participating employees commenced The System is a pension trust fund of the Commonwealth of Puerto Rico (the Commonwealth). The System, as a governmental retirement plan, is excluded from the provisions of the Employee Retirement Income Security Act of 1974 (ERISA)

The responsibility for the proper operation and administration of the System is vested on the Board of Trustees, composed of two participating employees and one pensioner, who are appointed by the Governor of the Commonwealth Also, there are four Commonwealth government agency tepresentatives which are the Secretary of the Treasury, the President of the Government Development Bank for Puerto Rico, the Executive Director of the Commonwealth's Human Resources Office (ORHELA), and the Municipal Affairs Commissioner

The following are the significant accounting policies followed by the System in the preparation of its financial statements:

### Basis of Presentation

The accompanying financial statements have been prepared on the accrual basis of accounting in accordance with the provisions of Governmental Accounting Standards Board No 25 (GASB No. 25), Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans. Participating employees and employer's contributions are recognized as additions in the period in which the employee services are tendered. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

During the year ended June 30, 2007 the System adopted the provisions of the Statement of Governmental Accounting Standards Board No. 43 (GASB No. 43), Financial Reporting for Post-employment Benefit Plans Other Than Pension Plans, the objective of which is to establish uniform standards of financial reporting by state and local governmental entities for other post-employment benefits plan. This statement provides standards for measurement, recognition and display of the asset, liabilities, not assets and changes in net assets and for related disclosure.

### Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of net assets held in trust for pension benefits, and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions to net assets held in trust for pension benefits during the reporting period. Actual results could differ from those estimates

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

### Cash and Short-Term Investments

Cash and short-term investments consist of overnight deposits guaranteed by the custodian bank, and certificates of deposits in Government Development Bank for Puerto Rico (GDB) and a commercial bank. Restricted cash deposited with GDB consists of payments received from mortgage loan holders administered by the mortgage services in the servicing of loans and also expired checks not claimed by the plan members.

#### Investments

Investments are carried at fair value, except for certain mortgage notes, which do not have readily determinable fair values. The fair value of notes, bonds and stocks is based on quotations obtained from national securities exchanges. Securities transactions are accounted for on the trude data.

The alternative investments have as assets, securities whose values have been estimated by the corresponding general partner or fund manager. Market values are not available. The estimated values may differ significantly from the amounts that could be obtained from dispositions or formal active markets if were available

Mortgage notes acquired from third parties are held to maturity and are not readily marketable. Consequently, these are carried at amortized cost.

### Loans to Plan Members

Mortgage, personal and cultural trip loans to plan members are stated at their outstanding principal balance. Maximum amounts that may be granted to plan members for mortgage, personal and cultural trip loans are \$100,000, \$5,000 and \$5,000, respectively.

The System services mortgage loans with aggregate principal balances of approximately \$11.9 and \$14.2 million at June 30, 2007 and 2006, respectively, related to certain mortgages loans sold to Federal National Mortgage Association (FNMA) for a fee of 0.25%. The income for 2007, and 2006 amounted to \$30,622, and \$40,265 respectively, and is recognized as interest income in the accompanying statement of changes in plan net assets.

In addition, as of June 30, 2007 and 2006, the System repurchased approximately \$51,090 and \$98,721, respectively, in mortgage loans that were sold during fiscal year 1998 to FNMA. The sale contract stipulates that the System must repurchase any loans with payments in arreats over 90 days.

#### Insurance Premiums, Claims and Reserve for Life Insurance on Loans to Plan Members

Premiums collected and benefits claimed are recorded as additions and deductions, respectively. The guarantee insurance reserve for life insurance on loans to plan members is revised each year and adjusted accordingly based on the annual higher claim amount of a five year period increased by a management determined percentage

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

### Capital Assets

Capital assets include building, furniture and equipment, capital leases and construction in progress. The System defines capital assets as assets, which have an initial individual cost of \$500 or more at the date of acquisition and have a useful life equal to or in excess of four years. Capital assets are recorded at historical cost or at estimated historical cost if actual historical cost is not available. Donated capital assets are recorded at their estimated fair value at time of donation.

Capital assets are depreciated on the straight-line method over the assets estimated useful life. There is no depreciation recorded for construction in progress. The estimated useful lives of capital assets are as follows:

	Years
Building	50
Buildings improvements	10
Equipment, furniture, fixtures, and vehicles	5-10

During the year ended June 30, 2007, the System adopted the provisions of Statement on Governmental Accounting Standards (GASB) No. 42, Accounting and Financial Reporting for Impairment of Capital Assets and for Insurance Recoveries, which establishes that, generally, an asset is considered impaired when its service utility has declined significantly and unexpectedly, and the event or change in circumstances is outside the normal life cycle of the asset. Management is then required to determine whether impairment of an asset has occurred. Impaired capital assets that will no longer be used by the government should be reported at lower of carrying value or fair value. Impairment losses on capital assets that will continue to be used by the government should be measured using the method that best reflects the diminished service utility of the capital asset Impairment of capital assets with physical damage generally should be measured using a restoration cost approach, an approach that use the estimated cost to restore the capital asset to identify the portion of the historical cost of the capital asset that should be written off. Management assessed and determined that no impairment adjustment was deemed necessary.

#### Future Adoption of Accounting Pronouncements

The GASB has issued the following accounting standards that have effective dates after June 30, 2007:

- GASB Statement No. 45, Accounting and Financial Reporting by Employees for Postemployment Benefits Other than Pensions, which is effective for fiscal years beginning after December 15, 2006.
- GASB Statement No 48, Sales and Pledges of Receivable and Future Revenues and Intra-Entity Transfers of Assets and Future Revenues, which is effective for fiscal years beginning after December 15, 2007.
- GASB Statement No 49, Accounting and Financial Reporting for Pollution Remediation Obligations, which is effective for fiscal years beginning after December 15, 2007

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Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

- GASB Statement No. 50, Pension Disclosures an amendment of GASB Statements No. 25 and No. 27, which is effective for fiscal year beginning after June 15, 2007.
- GASB Statement No. 51, Accounting and Reporting for Intangible Assets, which is effective for fiscal years beginning after June 15, 2009.
- GASB Statement No. 52, Land and Other Real Estate Held as Investments by Endowments, which is effective for fiscal years beginning after June 15, 2008.

The impact of these statements on the System's basic financial statements has not yet been determined.

## Reclassifications

Certain reclassifications have been made to the 2006 amounts to conform with current year presentation.

### 2. PLAN DESCRIPTION

The System is a cost-sharing multi-employer defined benefit plan sponsored by the Commonwealth, public corporations and municipalities of Puerto Rico. Substantially all full-time employees of the Commonwealth and its Instrumentalities (Commonwealth Agencies, Municipalities and Public Corporations, including the System) are covered by the System under the terms of the Act No. 447 of 1951. All regular, appointed and temporary employees of the Commonwealth at the date of employment become plan members of the System. The System is optional for Commonwealth officers appointed by the Governor and Head of Agencies.

At June 30, 2007 and 2006, membership consisted of the following:

	2007	2006
Retirees and beneficiaries		
currently receiving benefits	99,851	95,221
Current participating employees	107,256	116,018
Total membership	207,107	211,239

The plan members of the System, other than those joining the System after March 31, 1990, are eligible for the benefits described below:

### Retirement Annuity

Plan members are eligible for a retirement annuity upon reaching the following age:

#### Policemen and Firefighter:

50 with 25 years of credited service

58 with 10 years of credited service

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

## Other Employees:

55 with 25 years of credited service 58 with 10 years of credited service

Plan members are eligible for monthly benefit payments determined by the application of stipulated benefit ratios to the plan member's average compensation. Average compensation is computed based on the highest 36 months of compensation recognized by the System. The annuity, for which a plan member is eligible, is limited to a minimum of \$300 per month and a maximum of 75% of the average compensation.

### Merit Annuity

Plan members are eligible for merit annuity with a minimum of 30 years or more of credited service. The annuity for which the plan member is eligible is limited to a minimum of 65% and a maximum of 75% of the average compensation.

### Deferred Retirement Annuity

A participating employee who ceases to be an employee of the Commonwealth after having accumulated a minimum of ten years of credited service qualifies for retirement benefits provided his/her contributions to the System are left within the System until attainment of 58 years of age.

### Coordinated Plan

On the Coordinated Plan the participating employee contributes a 5 775% of the monthly salary for the first \$550 and 8.275% for the excess over \$550. By the time the employee reaches 65 years old and begins to receive social security benefits, the pension benefits are reduced by the following:

- \$165 per month if retired with 55 years of age and 30 years of eredited service
- \$110 per month if retired with less than 55 years of age and 30 years of credited service
- All other between \$82 and \$100 per month
- Disability annuities under the coordinated plan are also adjusted at age 65 and in some cases can be reduced over \$165 per month

### Non-Coordinated Plan

On the Non-Coordinated plan the participating employee contributes an 8.275% of the monthly salary and does not have any change on the pension benefits upon receiving social security benefits.

### Reversionary Annuity

A plan member, upon retirement, could elect to receive a reduced retirement annuity giving one or more benefit payments to his/her dependents. The life annuity payments would start after the death of the retiree for an amount not less than \$240 yearly or greater than the annuity payments being received by the retiree

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Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

### Occupational Disability Annuity

A participating employee, who as a direct result of the performance of his/her occupation is totally and permanently disabled is eligible for a disability annuity of 50% of the compensation received at the time of the disability

### Non-occupational Disability Annuity

A participating employee totally and permanently disabled for causes not related to his/her occupation, and with no less than 10 years of credited service, is eligible for an annuity of 1.5% of the average compensation of the first 20 years of credited services increased by 2% for every additional year of credited service in excess of 20 years.

### Death Benefits

### Occupational:

- Surviving spouse annuity equal to 50% of the participating employee's salary at the date of the death
- Children \$10 per month for each child, minor or student, up to a maximum benefit per family of 100% of the participating employee's salary at the date of the death. If no spouse survives, or dies while receiving the annuity payments, each child, age 18 or under, is eligible to receive an annuity of \$20 per month up to the attainment of 18 years of age or the completion of his/her studies.

#### Non-occupational:

• Beneficiary - the contributions and interest accumulated as of the date of the death plus an amount equal to the annual compensation at the time of the death.

### Post-retirement:

Beneficiary with surviving spouse age 60 or over and child, age 18 or under, up to 50% (60%, if
not covered under Title II of the Social Security Act) of retiree's pension or otherwise the excess,
if any, of the accumulated contributions at the time of retirement over the total annuity benefits
received before death, limited to a minimum of \$750.

### Refunds

A participating employee who ceases his/her employment with the Commonwealth without right to a retirement annuity has the right to a refund of the contributions to the System plus any interest earned thereon.

Amendments to Benefits Structure for Plan Members Who Joined the System on or After April 1, 1990

Act No. 1 of February 16, 1990 made certain amendments applicable to new participating employees joining the System effective April 1, 1990. These changes consist principally of an increase in the

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

retirement age from 55 to 65, a decrease in the benefit percentage of the average compensation in the occupational disability and occupational death benefits annuities from 50% to 40%, and the elimination of the Merit Annuity for participating employees (except policemen and firemen) who have completed 30 years of creditable service.

## Cost of Living Adjustment for Pension Benefits

Act No 10 of May 21, 1992 provided for increases of 3% every three years, of the pensions paid by the System to those plan members with three or more years of retirement. The Act requires further legislation to grant this increase every three years, subject to the presentation of actuarial studies regarding its costs and the source of financing. Since fiscal year 1992 to 2004 there have been other acts addressing the cost of living allowance (C.O.L.A.) as Act No 207 of August 13, 1995, Act No. 221 of August 9, 1998, Act No 40 of June 13, 2001, and Act No 157 of June 27, 2003.

On April 24, 2007 the Governor signed the Act No. 35 to provide for an increase of 3% of the pension paid by the System to those plan members which the retirement date was prior to January 1, 2004.

To protect the financial health of the System, the increases granted pursuant to the above laws are being financed through appropriations from the Commonwealth and contributions from municipalities and public corporations

#### Other Benefits Granted

For fiscal years 2003 to 2006 the Commonwealth of Puerto Rico granted additional benefits to the System's retirees. As of June 30, 2007 these increases are being funded through special appropriations from the Commonwealth for the amount corresponding to the Commonwealth agencies and by contributions from the public corporations and municipalities.

### Early Retirement Programs

During fiscal year 2001 the Commonwealth granted three additional retirement programs through Act No. 370, dated December 31<sup>st</sup>, 1999, Act No. 119 dated July 13<sup>th</sup>, 2000, and Act No. 174 dated August 12<sup>th</sup>, 2000. These acts applied to employees of the Municipality of San Juan, employees of the State Insurance Fund Corporation and the employees within the three branches of the of the Commonwealth of Puerto Rico, respectively. These early retirement programs ended in fiscal year 2006, time in which the total employees became fully beneficiaries of the System. To avoid any economic impact on the System, the employers were responsible for contributing to the System the amounts to cover the benefit payments and the employer and employee contributions with respect to the plan members covered until reach the normal retirement age

On November 22, 2005 the Commonwealth issued the Act No. 143 which provided an early retirement program for the employees of the Puerto Rico Industrial Development Company (PRIDCO) The actuarial cost of the implementation of the PRIDCO's early retirement program would be paid by PRIDCO prior to the implementation of the program as established in the act.

During fiscal year 2007 the Commonwealth issued the Act No. 273, dated December 21, 2006, to implement an early retirement program for the employees of the Puetto Rico Tourism Company

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Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

(Tourism). Also the Municipality of San Juan issued the Resolution No. 41, dated November 17, 2006, which provided also, an early retirement program for the municipalities' employees. The actuarial cost of the implementation of the Tourism's early retirement program would be paid by Tourism prior to the implementation of the program. The Municipality of San Juan would reimburse the annuities and other benefits paid by the System during a five year period plus the employer and employee contributions with respect to the plan members covered until reach the normal retirement age.

As of June 30, 2007, \$18.9 million, \$23.1 million and \$27 million have been received from PRIDCO, Tourism and the Municipality of San Juan, respectively, to amortize the increase in additional annuities paid by the System.

## Amendment to Act No. 447 Effective January 1, 2000 to create a Defined Contribution Plan

On September 24, 1999, Law 305, an amendment to Act No. 447 of May 15, 1951, which created the System, was enacted to establish a defined contribution plan, known as System 2000 to cover employees joining the System on or after January 1, 2000.

Employees participating in the current system as of December 31, 1999, were allowed to elect either to stay in the defined benefit plan or transfer to System 2000. People joining the public sector on or after January 1, 2000, are only allowed to become members of System 2000. System 2000 is a hybrid defined contribution plan, also known as a cash balance plan. Under this new plan, there will be a pool of plan assets, which will be invested by the System, together with those of the current defined benefit plan. The Commonwealth will not guarantee benefits at retirement age.

The annuity will be based on a formula which assumes that each year the employee's contribution (with a minimum of 8.275% of the employee's salary up to a maximum of 10%) will be invested as instructed by the employee in an account which either: (1) earns a fixed rate based on the two-year Constant Maturity Treasury Notes or, (2) earns a rate equal to 75% of the return of the System's investment portfolio (net of management fees), or (3) earns a combination of both alternatives. Plan members receive periodic account statements similar to those of defined contribution plans showing their accrued balances. Disability benefits are not granted under System 2000 rather should be provided to those plan members that voluntarily elect to participate in a private insurance long-term disability program. The employers' contributions (9.275% of the employee's salary) with respect to employees under System 2000 will continue but will be used to fund the defined benefit plan System 2000 will reduce the retirement age from 65 years to 60 for those employees who joined the current plan on or after January 1, 2000.

At June 30, 2007 and 2006, System 2000 membership within the System's total membership consisted of the following:

	2007	2006
Current participating employees	69,581	60,324

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Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

## 3. FUNDING POLICY

The contribution requirement to the System is established by law and is not actuarially determined. Required employers' contributions consist of 9 275% of applicable payroll in the cases of municipalities, central government and public corporations. Required employee contribution consists of 5.775% of the first \$550 of the monthly salary with the excess at 8.275% for the coordinated plan and 8.275% of the total monthly salary for participating employee's contributions for the non-coordinated plan. Commonwealth contributions should ultimately cover any deficiency between the participating employers' and employee's contributions and the System's pension benefit obligations and general and administrative deductions

The System received from the Commonwealth \$117.9 and \$113.6 million in 2007 and 2006, respectively, to cover special laws. The additional contributions are accounted as reduction of benefits payments, except for approximately \$17 million and \$16.7 million in 2007 and 2006, respectively, which are received under the provisions of Law No. 127 of 1958 that covers the occupational disability of firefighter, policemen and other personnel disabled during high risk circumstances.

The System, besides the contributions received from plan members and employers, also receives legislative appropriations from special laws to cover additional benefits and the increase in benefits to retired employees. In the past years there have been laws that granted additional benefits; such as, summer and Christmas bonuses, medical plan contributions, and various increases in cost of living allowances (3%), among others. Most of the funds used to cover these benefits are budget by the Commonwealth through legislative appropriations.

As of June 30, 2007 and 2006 the System believes that they had to cover approximately \$73.9 million, for each year, of costs from its resources that should have been received through special laws. From these costs, as of June 30, 2007 and 2006 there were \$3 and \$4.1 million, respectively, included in the financial statements as receivables from the Commonwealth of Puerto Rico; the remaining amount has not been accrued pending a final review by the System and the acceptance by the Office of Management and Budget of the Commonwealth

#### Senior Pension Funding Bonds

On February 27, 2007, the System's administration and the Government Development Bank for Puerto Rico, acting as the System's fiscal agent, presented to the Board of Trustees, a financial transaction for the issuance of pension funding bonds in order to reduce the System's unfunded actuarial accrued liability. The Board of Trustees authorized to continue the process for this transaction.

#### Actuarial Information

Calculations of the present value of benefits under the System were made by consulting actuaries as of June 30, 2005, using the projected unit credit actuarial cost method. Significant assumptions underlying the actuarial computations include: (a) assumed rate of return on investments of 8.5%, (b) assumed compound rate of wage increases of 5% per year, and (c) assumed mortality rate based on the Group Annuity Table for 1983.

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Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

As of June 30, 2005 the actuarial accrued liability and the unfunded actuarial accrued liability were approximately \$12,284 and \$9,956 million, respectively.

The Legislature of the Commonwealth enacted Act No. 1 of February 16, 1990 to improve the solvency of the System for the next 50 years. Among other provisions, the legislation increased the level of contributions to the System, reduced the benefits for new participating employees and increased the retirement age from 55 to 65 years. Further, through Act 305 of September 24, 1999, the defined benefit plan was closed and a defined contribution plan was created (as described in Note 2) for all plan members who started working for the Commonwealth effective January 1, 2000 or after.

As an employer, the System has contributed \$1,525,000 and \$1,536,000 which represented its contractually required contribution for the years ended June 30, 2007 and 2006, respectively

#### 4. CASH AND INVESTMENTS

## Custodial Credit Risk Related to Deposits

As of June 30, 2007 and 2006, the System's custodial credit risk was approximately \$275.4 million and \$44.0 million, respectively, related to the bank balance of cash and short-term investments deposited at GDB for Puerto Rico. These deposits are exempt from the collateral requirement established by the Commonwealth.

Custodial credit risk is the risk that, in an event of a bank failure, the System's deposits might not be recovered. The Commonwealth requires that public funds deposited in commercial banks must be fully collateralized for the amount deposited in excess of federal depository insurance. All securities pledged as collateral are held by the Secretary of the Treasury of the Commonwealth. Deposits at GDB for Puerto Rico are uninsured and uncollateralized, as these entities, which are component units of the Commonwealth, are exempt from compliance with the collateralization requirement.

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Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

#### Investments

The following table shows the fair value of the investments in marketable securities held by the System as of June 30, 2007 and 2006 (in thousands):

		2007	2006
		(in thou	isands)
Bonds:			
US Government and agencies' securities			
Not Under Repurchase Agreement	\$	96,879	202
Under Repurchase Agreement	_		91,504
Total US Government and agencies' securities		96,879	91,706
US Corporate bonds			
Not Under Repurchase Agreement		52,760	6,465
Under Repurchase Agreement			56,654
Total US Corporate bonds	_	52,760	63,119
Total bonds	deres	149,639	154,825
Equity Investments:			
US Corporate stocks		1,137,987	948,269
Non-US Corporate stocks		555,157	428,632
Total stocks		1,693,144	1,376,901
Private equity investments	Mary	47,784	41,609
Total equity investments	****	1,740,928	1,418,510
Total investments	S	1,890,567	1,573,335

Cash and short-term investments include approximately \$148.2 million as of June 30, 2006 held as pledged collateral by a custodian bank in connection with a master repurchase agreement which was executed on June 29, 2007, liquidating such liability and liberating the associated collateral (see note 9).

The System's investments are exposed to custodial credit risk, credit risk, concentration of credit risk, foreign currency risk and interest rate risk. Following is a description of these risks as of June 30, 2007.

### Custodial Credit Risk Related to Investments

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the System may not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. At June 30, 2007 and 2006 securities investments were registered in the name of the System and were held in the possession of the System's custodian banks, State Street Bank and Trust, Citibank N.A., and Morgan Stanley.

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

#### Credit Risk

All fixed income securities at the time of purchase must be of investment grade quality. All issuances shall be rated investment grade by at least two of the nationally recognized rating agencies. The portfolio is expected to maintain a minimum weighted average credit quality of either "A" or better using either Standard and Poor's or Moody's Investor Service credit ratings. The following table presents the bonds Moody's ratings as of June 30, 2007 and 2006, respectively (in thousands):

		Fair V	'alue	
Moody's Rating	Investment Type	 2007	2006	
AAA	US Government and Agencies Securities	\$ 96,879	84,702	
AAA	Corporate Bonds	990	1,045	
AAi	Corporate Bonds	2,344	2,710	
AA3	Corporate Bonds	12,522	11,508	
Al	Corporate Bonds	4,414	5,420	
A2	Corporate Bonds	5,229	2,574	
A3	Corporate Bonds	4,449	6,826	
BAA1	Corporate Bonds	2,653	5,429	
BAA2	Corporate Bonds	7,279	12,584	
BAA3	Corporate Bonds	8,886	4,264	
BA1	Corporate Bonds	Vanaar/	2,130	
Bt	Corporate Bonds	AMERICAN	3,810	
B2	Corporate Bonds	"antanormic	1,125	
B3	Corporate Bonds	existen	3,694	
CAA1	Corporate Bonds	3,994	Amphilippa	
NR	GNMA	Al-Marachanho.	7,004	
	Total bonds	\$ 149,639	154,825	

### Concentration of Credit Risk

No investment in marketable securities in any organization represents 5% or more of the System's net assets held in trust for pension benefits.

#### Interest Rate Risk

In accordance with its investment policy, the System manages its exposure to declines in fair values by structuring the investment portfolio so that securities mature to meet cash requirement for benefit payments, thereby avoiding the need to sell securities on the open market prior to maturity. Investments in equity securities are not subject to the maximum maturity policy since they do not carry a maturity date. The System is expected to achieve capital preservation and income generation by investing in diversified portfolio of marketable, investment grade core fixed income securities

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

The following table summarizes the investments on debt securities of the System at June 30, 2007 (in thousands):

				Investment Maturities (In Years)			
	Maturity from		Fair Volue	Less than 1	1-5	More than 5-10	More than 10
U S Government and agencies securities	(2007-2033)	S	96,879	86,038		4,939	5,902
Corporate bonds	(2007-2035)		52,760	***************************************	22,817	15,432	14,511
Total bonds		S	149,639	86,038	22,817	20,371	20,413

As of June 30, 2007, investments maturities are as follows:

	Maximum
Maturity	Maturity
Less than one year	57%
One to five years	15%
More than five to ten years	14%
More than ten years	14%

## Foreign Currency Risk

As of June 30, 2007 and 2006, the System owned approximately \$555 and \$428 million, respectively, in an international equity commingled fund under the custody of Morgan Stanley investment bank, which represented approximately 74.11% and 74.03%, respectively, of the total commingled fund. As of June 30, 2007 this pooled trust has an asset mix and country allocation as shown in the following table:

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(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

4 <b></b>			2007	1006
Assets Nija			Percent	Percent
Cosh and Short Term Investments	<u>z</u>		151	0.94
Future Contracts			12 14	8 76
Equity Securities			86.35	90.30
	rota!		100 00	100 00
Country Allocation	Currency	Currency Code	Portfolio %	Portfolia %
Poland	Zlotych	PIN	0.61	0 49
Russia	Rubles	RUB	0.99	1.51
Eastem Europe			1.60	2.00
Austria	Ento	EUR	3 00	0.78
Helgium	Euro	EUR	<b>∂</b> 55	0.63
Finland	Биго	EUR	0 95	1 22
France	Euro	EUN	9 39	18.8
Gennany	Euro	EUR	1161	9 99
Greece	Euro	EUR	0.24	D. 24
Ireland	Euro	EUR	0 05	<i>M</i>
Netherlands	Euro	EUR	2 47	2.51
ftaly	Euro	EUR	0 99	
Portuga!	Euro	EUR	0.16	Ŭ 14
Spain	Euro	EUR	2.02	1.27
Euro Europe			29.43	26,08
Bruzil	Real	BRL	1 93	1 27
Colombia	Pesos	COP	0.05	296.
Mexico	Pesos	MXN	1.05	0.50
Latin America			ξή,ξ	1.77
Cyprus	Pounds	CYP	0.04	**
Turkey	Lira	TRY	0.22	0.71
Middle East			0.26	0.71
Denmark	Kroner	DKK	041	0.40
Norway	Kroner	NOK	1 32	0 45
Sweeden	Kronu	SEK	2 61	2 13
Switzerland	Francs	CHF	4 72	5.23
United Kingdom	Pounds	GDP	17.85	2(1,27
Non-Euro Europe			26.91	28.48
Australia	Dollars	AUD	381	3 65
China	Yuan Ranmimbi	CNY	1 80	_
Hong Keng	Dollars	HKD	1 26	3 38
Indoessia	Rupialis	IDK.	0.48	*
Jopan	Yen	JPY	14 72	29 70
Malasya	Ringgits	MYR	0.08	
New Zealand	Dollars	NZD	0.01	100
Singapore	Dollars	SGD	2 14	( <b>H</b> )
South Korea	Wen	KRW	0.56	
Thailand	Bahi	THE	0.00	0.43
Taiwan	New Dollars	TWD	0.14	*
Pacific		,	35.00	38.97
Emu	Euro	CUR	Ū (5I)	0.60
South Alrica	Rand	ZAR	0 14	0 45
India	Rupees	INR	1,50	7 -2
Other	eraly-co	VI-41.C	2.26	1.05
Cash			1.51	0.94
	Total		\$00 00	100 00

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

As of June 30, 2007, the System had capital commitments and contributions as follows (in thousands):

,		te of nitment	Total Commitment	FY 07 Contributions	Contributions to Date at Cost	Estimated Value
Grupo Guayacán, Inc						
Guayacán Fund of Funds, LP	Sept	1996	\$ 25,000	224	23,503	8,735
Guayacán Fund of Funds II, LP	Aug	1999	25,000	3,772	23,411	16,859
Advent-Morro Equity Partner, Inc						
Guayacán Private Equity Fund, LP	Jan	1997	5,000	gamaga.	4,407	5,153
Guayacán Private Equity Fund II, LP	Apr	2007	15,000	1,200	1,200	1,129
Venture Capital Fund, Inc	Nov	1995	800		800	633
GF Capital Management & Advisors, LLC						
GF Capital Private Equity Fund LP	Dec	2006	25,000	3,125	3,125	2.754
Chase Capital Partners Private						
Equity Fund of Funds Corporate		***	***		15000	
Investors II, LTD	Jul	2000	20,000	1,068	17,969	12,521
Martineao Bay Resort, s en c (s c)	Jul	1998	1,796		1,796	
Total alternative investments			\$ 117,596	9,389	76,211	47,784

As of June 30, 2006, the System had capital commitments and contributions as follows (in thousands):

	Date of Commitment	<del></del>	Total Commitment	FY 06 Contributions	Contributions to Dute at Cost	Estimated Value
Grupo Guayacán, Inc						
Guayacán Fund of Funds, LP	Sept 1996	S	25,000		23,279	9,246
Guayacán Fund of Funds II, LP	Aug 1999		25,000	Andrew	19,639	16,916
Advent-Morro Equity Partner, Inc						
Guayacán Private Equity Fund, LP	Jan 1997		5,000	477	4,407	5,234
Venture Capital Fond, Inc	Nov 1995		800	vector	800	737
Chase Capital Partners Private						
Equity Fund of Funds Corporate						
Investurs II, LTD	Jul 2000		20,000	1,266	16,307	9,476
Martineau Bay Resort, s en c (s e)	Jul 1998		1,796		1,796	
Total alternative investments		S	77,596	1,743	66,228	41,609

The fair value of investments in limited partnerships as of June 30, 2007 and 2006 amounted to

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

approximately \$47.8 and \$41.6 million, respectively, and is presented within investments in the statements of plan net assets. The allocations of net gain and net loss to limited partners are based on certain percentages, as established in the limited partnership agreements. The distributions for these investments were as follows:

- During fiscal year 2007, \$224 thousand were invested to Guayacán Fund of Funds, L.P., a Delaware limited partnership created by Grupo Guayacán, Inc. as General Partner in which the System has a total commitment of \$25 million. The Fund has commitments to invest in fifteen (15) US based and international venture partnerships and familiarizes the local pension funds with the private equity asset class without the risks inherent in geographically constrained investments. There were no contributions to this fund during fiscal year 2006.
- During fiscal year 2007, \$3.8 million were invested to Guayacán Fund of Funds II, L.P., a Delaware limited partnership created by Grupo Guayacán, Inc. as General Partner in which the System has a total commitment of \$25 million. The Fund seeks to provide investors with a superior investment return and extensive diversification by investing in nineteen (19) Private Equity investment partnerships in the United States and Europe. The Fund also invests a portion of its assets in a Puerto Rico based Private Equity investment entity. There were no contributions to this fund during fiscal year 2006.
- During fiscal year 2007, there were no contribution to the Guayacán Private Equity Fund, L.P., a limited partnership organized pursuant to the laws of the state of Delaware and authorized to engage in business in the Commonwealth of Puerto Rico, in which the System has a total commitment of \$5 million. The purpose of the Partnership is to make equity investments in privately held companies as established in its charter. Total contributions for fiscal year 2006 amounted to approximately \$477 thousand.
- During fiscal year 2007, \$1.2 million were invested to Guayacán Private Equity Fund II, L.P., a limited partnership organized in April 2007, pursuant to the laws of the State of Delaware, in which the System has a total commitment of \$15 million. The Partnership intends to seek out, invest in, and add value to companies, which will be based or operating in Puerto Rico or in companies whose products or services are targeted at the U.S.-Hispanic market, with specific interest in those companies where Advent-Morro's Equity Partners, Inc. Puerto Rico contact, know-how and track record can be leveraged to enhance investment selection and post-investment value-add. Guayacán Private Equity Fund II, L.P will strive to have a balanced mix of portfolio investments primarily focusing on later stage opportunities such as: expansion financing, leveraged buyouts, management buyouts and recapitalizations. The Partnership may invest in de-novo companies that are being set up to enter established industries via market consolidation opportunities and/or internal growth.
- During fiscal years 2007 and 2006 there were no additional contributions to Venture Capital Fund, Inc., a Puerto Rico corporation organized pursuant to Act No. 3 of October 6, 1987, as amended, known as the Puerto Rico Capital Investment Funds Act that is managed by Advent-Morro Equity Partners (Advent-Morro), in which the System has a total commitment of \$800 thousand. Advent-Morro is a Puerto Rico based private equity firm. The Fund was created to make private equity investments in operating companies which are based, or are operating or a

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

combination both in Puerto Rico. Since inception, the Fund has invested in 25 companies some of which it continuous to provide capital for their expansion.

- During fiscal year 2007, \$3.1 million were invested in GF Capital Private Equity Fund, L.P., a limited partnership organized under the laws of the State of Delaware, in which the System has a total commitment of \$25 million. The purpose of the partnership is to make private equity investments in a variety of industries including media and entertainment, branded consumer products, and software for media and telecommunications applications. The Partnership initiatives are focused on companies capitalized at between \$20 to \$400 million with a representation of buy-outs, growth capital and recapitalizations.
- During fiscal year 2007 and 2006, \$1.1 and \$1.3 million, respectively, were invested in Chase Capital Partners Private Equity Fund of Funds Corporate Investors II, LID a limited partnership, organized by Chase as General Partner in which the System has a total commitment of \$20 million. The Fund's investment strategy is to capitalize on a globally diversified portfolio of private equity investment opportunities across various sectors including buyouts, growth equity, venture capital and other special situations through partnership and direct investments.

The investment in Martineau Bay represents an investment in a hotel resort that filed under Chapter 11 of the United States Bankruptcy Code.

#### Securities Lending Transactions

The System entered into securities lending transactions. The System's securities custodian, as agent, manages the securities lending program and receives liquid collateral. At June 30, 2007 and 2006, the collateral received represents 103.88% and 103.23%, respectively, of the fair value of the securities lent.

Securities lending obligations for which collateral was received at June 30, 2007 and 2006 consisted of the following (in thousands):

		Value
	2007	2006
Securities Lent		
US. Equity	\$ 61,844	35,885

The underlying collateral for these securities had a market value of approximately \$64.2 and \$37 million as of June 30, 2007 and 2006, respectively, and was invested as follows (in thousands):

	 200	7	2006		
Asset Backed Commercial Paper	\$ 9,369	14 58%	937	2 53%	
Reverse Repo U.S. Agency Delivered	6,154	9 58%	5,191	1401%	
Certificate of Deposits		0 00%	2,811	7 59%	
Reverse Repo Mortgage Backes Tri-Party	 48,720	75.84%	28,108	75.87%	
Total	\$ 64,243	100.00%	37,047	100.00%	

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

The System has low credit risk exposure to borrowers. The System's rights to collateral are defined in the contractual agreement. There is collateral in excess of 100%. In case of borrower default, the System has immediate rights to collateral. Borrower's creditworthiness is also proactively reviewed by the Lending Agent.

#### 5. LOANS AND INTEREST RECEIVABLE FROM PLAN MEMBERS

The loans receivable from plan members are guaranteed by the contributions of plan members and by other sources, including mortgage deeds and any unrestricted amount remaining in the escrow funds. In addition, collections on loans receivable are received through payroll withholdings

The allowance for loan losses is considered a general allowance for all categories of loans and interest receivable except mortgage loans, and also a specific allowance for the special collection project loans balances

The composition of loans and interest receivable from plan members is summarized as follows (in thousands):

		2007	2006
Loans receivable:			
Mortgage	\$	107,680	96,544
Personal		439,854	405,756
Cultural trips		27,813	23,762
Total loans to plan members	***************************************	575,347	526,062
Accrued interest receivable		16,200	16,727
		591,547	542,789
Less: Allowance for adjustments			
and losses in realization	·	(14,233)	(14,237)
Total loans receivable, net	5	577,314	528,552

## 6. ACCOUNTS RECEIVABLE FROM EMPLOYERS

During 2007 the System recorded approximately \$64.5 million as a reduction of annuities disbursements, regarding the amount billed for special laws that are the financial responsibility of the corresponding employers. The management of the System recorded all revenues during fiscal year 2007 since they believe that the information available in previous years was not sufficient and reliable to determine an accurate amount.

From the \$41 million of accounts receivable from employers as of June 30, 2007, 46% are supported by installment payment agreements signed by the counterparties, 37% accepted the amount billed by the System, but requested a term extension to sign the agreements after analysis by the governing bodies of the counterparties and 17% which have not accepted nor rejected the amount billed by the System.

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Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

The total amount included as receivable as of June 30, 2007, includes an allowance for doubtful accounts of approximately \$7 million mainly caused by the amount billed to the employers which as of end of fiscal year have not replied to the System either accepting or rejecting the amount billed to them. It is the management understanding that the remaining receivable balances do not need an allowance for doubtful accounts since these employers have consistently showed an acceptable payment history toward the System.

Accounts receivable from employers consist of contributions and loan repayments due from municipalities and public corporations. The employers, other than Commonwealth agencies, must pay directly to the System. According to Act 447, each employer must pay on a monthly basis, the amounts regarding contributions and loan repayments, on or before the fifteenth day of the following month. After that date, interests are charged, as established by the System. As of June 30, 2007 and 2006, the receivable from employers amounted to \$117.4 and \$63.6 million, respectively.

#### 7. INVESTMENT IN PRTA HOLDINGS

On August 4, 1997, the Senate of Puerto Rico approved Law No. 54, which authorized the Government to commence negotiations to sell the Puerto Rico Telephone Company (PRTC or TELPRI). On June 24, 1998, the Senate and the House of Representatives issued Joint Resolution 209 to authorize the final sale of 50% plus one share of the stock of TELPRI to a joint venture created between GTE Holdings (Puerto Rico) LLC (a subsidiary of Verizon Communications) and Banco Popular de Puerto Rico (the Buyers) and to designate the use of the sale proceeds

In the same resolution, it was established that the shares of TELPRI's common stock that were not sold on the Closing Date of the First Sale, as defined in the Resolution, should be transferred to the GDB, and further, it also instructed GDB to create a subsidiary to hold and dispose of that stock for the benefit of the System. The First sale took place on March 2, 1998. After the First sale, the Commonwealth retained 43% of TELPRI's stock.

Subsequently, GDB created a subsidiary, known as PRTA Holdings and transferred the TELPRI'S stock retained by the Commonwealth to that subsidiary. On December 28, 2000, PRTA Holdings issued and assigned its non-cumulative, non-voting preferred stock to the System, entitling the System to receive the benefits that the TELPRI's stock would generate in the future. PRTA Holdings' capital structure consists of 100 shares of common stock at \$0.01 each owned by GDB and 100 shares of non-convertible, non-voting preferred stock, owned by the System. As established by the Articles of Incorporation of PRTA Holdings, the product of the future sale of any shares of the TELPRI stock and any dividends declared by TELPRI will benefit the System. During the years ended June 30, 2007 and 2006, the System received \$9.9 and \$40.7 million, respectively, consisting of the dividends declared and paid by TELPRI.

In connection with the First Sale of TELPRI's stock on March 2, 1998, the Buyer was granted an option, to purchase an additional 15% of the TELPRI's stock at a fixed price of \$45.94 per share, expiring on March 2, 2002. The Buyer exercised the option on January 25, 2002. The total proceeds from the exercise of this option amounted to \$172 million.

On March 30, 2007 PRTA Holdings sold to Sercotel, S.A. the remaining TELPRI's stocks at a fixed price of \$75.60931 per share. Total proceeds from the sale amounted to \$529.3 million. The book value of the stocks was \$495.3 million, resulting in a realized gain of \$34 million. The proceeds of

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Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

this transaction were used to: (1) repay the liability associated to the securities sold under agreements to repurchase, (2) repay the line of credit with the Santander Bank, and (3) to cover the bank overdraft at the Treasury Department (See notes 10 and 11)

## 8. CAPITAL ASSETS

Capital assets activity for the year ended June 30, 2007 was as follows (in thousands):

		Beginning Balance	Increases	Decreases	Ending Balance
Capital assets, not being depreciated:					
Land	5	969	*****	**************************************	969
Construction in progress		***************************************	1,375	3440040000	1,375
Total capital assets, not being depreciated		969	1,375		2,344
Capital assets, being depreciated:					
Building and improvements		7,631	**************************************	ALLES	7,631
Equipment		12,780	295	117	12,958
Total capital assets, being depreciated		20,411	295	117	20,589
Less accumulated depreciation for:					
Building and improvements		3,342	[13	20.0 ***********************************	3,455
Equipment		10,344	770	112	11,002
Total accumulated depreciation		13,686	883	112	14,457
Total capital assets					
being depreciated, net		6,725	(588)	5	6,132
Total capital assets, net	\$	7,694	787	5	8,476

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(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

Capital assets activity for the year ended June 30, 2006 was as follows (in thousands):

		Beginning Balance	Increases	Decreases	Ending Balance
Capital assets, not being depreciated:	-				
Land	\$_	969	wheeling	belevireles	969
Capital assets, being depreciated:					
Building and improvements		7,631	*********		7,631
Equipment		12,677	186	83	12,780
Total capital assets, being depreciated	-	20,308	186	83	20,411
Less accumulated depreciation for:					
Building and improvements		3,229	113		3,342
Equipment		9,637	790	8.3	10,344
Total accumulated depreciation	-	12,866	903	83	13,686
Total capital assets					
being depreciated, net	_	7,442	(717)		6,725
Total capital assets, net	s	8,411	(717)		7,694

#### 9. OTHER ASSETS

At June 30, 2007 and 2006, other assets consisted of the following (in thousands):

	 2007	2006
Repossessed and foreclosed properties	\$ 2,672	2,893
Executed land	4,699	4,699
Total	\$ 7,371	7,592

Repossessed and foreclosed properties consist mainly of properties acquired through foreclosure proceedings related to delinquent mortgage loans. Foreclosed properties are valued at the outstanding principal balance of the related mortgage loan upon foreclosure. These properties will be sold under a bidding process intended to recover the outstanding principal balance of the related mortgage loan. Gain or loss is recognized at the time of sale.

Differences resulting from recognition of losses at the point of sale rather than upon foreclosure, as required by accounting principles generally accepted in the United States of America, are not material. Management believes that the carrying value of these properties approximates its fair value.

As of June 30, 2007 and 2006, a total of 14,618 square meters of land remained under the possession of the System. According to an independent appraisal as of June 8, 2005, the estimated market value of this land approximates \$22.8 million.

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

### 10. SECURITIES SOLD UNDER AGREEMENTS TO REPURCHASE

During fiscal year 2005, securities underlying agreements to repurchase were delivered to, and are being held by, the counterparties with whom the repurchase agreements were transacted. The counterparties have agreed to resell to the System the same securities at the maturity of the agreements. The System may be required to provide additional collateral based on the fair value of the underlying securities.

On June 29, 2007 the System executed the repurchase agreement with the counterparty, liquidating the liability associated with this transaction and liberating the associated collateral, using the sales proceeds of the investment in PRTA Holdings (see note 7).

The following table presents the liability associated with the repurchase transactions, the amortized cost and market value of the collateral as of June 30, 2006 (in thousands):

	_		Fiscal Year 2000	5
	29	Repurchase Liability	Amortized cost of collateral	Market value of collateral
U.S. Treasury securities U.S. Government agencies	\$	63,944	64,528	64,839
securities Collateralized mortgage		19,362	19,987	19,863
obligations		7,200	7,017	6,802
Corporate bonds	-	48,568	53,379	56,654
Total	\$	139,074	144,911	148,158

#### 11. LINE OF CREDIT

The System entered into a credit agreement with a financial institution as of June 29, 2006 in which loans could be made from time to time in the aggregate principal amount not exceeding \$112 million at any time outstanding, at a variable rate subject to LIBOR plus the Applicable Margin (50 basis points in the case of LIBOR rate or 0 basis points in the case of Base Rate Advances). As of June 30, 2006 the outstanding balance of the line of credit was approximately \$60 million, however this balance was paid on June 29, 2007 with the sales proceeds of the investment in PRTA Holdings (see note 7).

### 12. GUARANTEE INSURANCE RESERVE FOR LOANS TO PLAN MEMBERS

The System provides life insurance that guarantees the payment of the outstanding principal bolance of mortgage, personal and cultural trip loans in case of death of a plan member. The plan members who obtained these loans from the System pay the coverage in its entirety. The life insurance rates are actuarially determined and do not vary by age, sex or health status.

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Basic Financial Statements Years Ended June 30, 2007 and 2006

### 13. REIMBURSEMENT CLAIM

The System, besides receiving contributions from plan members and the plan sponsor, also receives legislative appropriations from special laws to cover the increase in benefits to retirees. There have been several acts which established an increase of 3% in pension annuities every three years for those members who meet the requirements outlined by these acts (Act No. 10 of May 21, 1992, Act No. 207 of August 13, 1995, Act No. 221 of August 9, 1998, Act No. 40 of June 13, 2001, and Act No. 157 of June 27, 2003) Also there have been other laws that granted additional benefits, such as, summer and Christmas bonuses, and medical plan contributions, among others. Most of the funds needed to cover these benefits are budgeted by the Commonwealth through legislative appropriations. Nevertheless, the System believes that the costs of pension benefits from 1992 to June 30, 2004 pursuant to the above laws were not received in full by the System from legislative appropriations. The System had to cover approximately \$73.9 million from its resources that the System believes should have been received through special laws appropriations. As of June 30, 2007 the System had filed a reimbursement claim with the Office of Management and Budget of the Commonwealth to collect this amount. The final outcome of this claim cannot be presently determined, therefore no accruals has been made in the System's financial statements.

#### 14. COMMITMENTS AND CONTINGENT LIABILITIES

### Loss Contingency

The System is defendant or co-defendant in various lawsuits resulting from the ordinary conduct of its operations. Based on the advice of legal counsel and considering insurance coverage, management is of the opinion that the ultimate liability, if any, will not have a significant effect on the financial status of the System.

### Construction Commitments

The System has entered into various contracts with outside contractors for construction and remodeling the building facilities. The System records the liability for these contracts as progress billings are received, based on completed work. The uncompleted portion of these contracts approximated \$2 million as of June 30, 2007.

\* \* \* \* \*

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Required Supplementary Schedules of Employers' Contributions and Funding Progress

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Schedule of Employer's Contribution June 30, 2007 (In Thousands)

Year Ended June 30,	Annual Required Contributions	Contributions	Percentage Contributed	(Excess)/ Deficiency
2007	\$ Not available	443,491	N/A	ACCORDANA MAIN
2006	564,217	398,372	71%	(165,845)
2005	578,387	374,823	65%	(203,564)
2004	578,387	330,336	57%	(248,051)
2003	802,536	330,404	41%	(472,132)
2002	802,536	308,228	38%	(494,308)
2000	890,800	549,855	62%	(340,945)
1999	845,000	491,800	58%	(353,200)

Annual Required Contribution for the year ended June 30, 2001 is not available. Information prior to June 30, 2001 is from June 30, 2001 Audited Financial Statements.

See notes to supplementary schedule of employers' contributions and funding progress

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Schedule of Funding Progress June 30, 2007

(In Thousands)

Actuarial Valuation Date		Actuarial Value of Plan Assets	Actuarial Accrued Liability - Unit Credit (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Annual Covered Payroll	UAAL as a Percentage Covered Payroll
June 30, 2005	5	2,327,871	12,283,865	9,955,994	19%	4,125,866	241%
June 30, 2004		2,141,442	APAMANA.		N/A	राजनाज	N/A
June 30, 2003		1,947,402	11,191,357	9,243,955	17%	3,334,441	277%
June 30, 2002		1,979,677		10000-000	N/A	Adminis	N/A
June 30, 2001		2,428,664	9,881,481	7,452,817	25%	2,549,446	292%
June 30, 2000		2,041,800	9,459,300	7,417,500	22%	2,463,400	301%
June 30, 1999		1,858,000	8,308,000	6,450,000	22%	2,575,000	250%

Annual Required Contribution for the year ended June 30, 2001 is not available. Information prior to June 30, 2001 is from June 30, 2001 Audited Financial Statements.

See notes to supplementary schedule of employers' contributions and funding progress

# Employee's Retirement System of the Government of the Commonwealth of Puerto Rico

(A Pension Trust Fund of the Commonwealth of Puerto Rico)

Notes to Supplementary Schedules of Employer's Contribution and Funding Progress June 30, 2007

#### 1. SCHEDULE OF CONTRIBUTIONS

The Schedule of Contributions provides information about the annual required contributions (ARC) and the extent to which contributions made cover the ARC. The ARC is the annual required contribution for the year calculated in accordance with certain parameters, which include actuarial methods and assumptions.

The System's Schedule of Contributions includes both Commonwealth's and participating employee's contributions as the Commonwealth's contributions, ultimately, should cover any deficiency between the participating employee's contributions, the pension benefits and the System's administration costs

The information was obtained from last actuarial report as of June 30, 2005

## 2. SCHEDULE OF FUNDING PROGRESS

The Schedule of Funding Progress provides information about the funded status of the System and the progress being made in accumulating sufficient assets to pay benefits when due The information was obtained from the last actuarial report as of June 30, 2005.

# 3. ACTUARIAL DATA

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Starting July 1, 2001, the actuarial valuation is being performed every two years. Additional information as of the latest actuarial valuation follows:

Valuation Date June 30, 2005

Actuarial Cost Method Projected unit credit cost method

Amortization Method Level percent of pay

Remaining Amortization Period 21 years
Asset Valuation Method Market value

Investment rate of return\* 8.50%
Projected salary increases\* 5.00%

Mortality rate Group Annuity Mortality Table for 1983

Cost of living adjustment None

\* Includes inflation at 3.50%

Actuarial Assumptions:

\* \* \* \* \*

**Appendix III** 

# Additional Information Relating to the System

## General

The System is a trust created by the Legislature of Puerto Rico in 1951 pursuant to the Act to provide retirement and disability annuities, death benefits, and loans to certain of Puerto Rico's public employees. Persons eligible to become members of the System (the "Members") include: (i) all persons holding regular positions in any executive department, agency, administration, board, commission, committee, office or instrumentality of the Executive Branch of the Government of the Commonwealth; (ii) all members and regular employees of the Legislative Branch of the Government of the Commonwealth; (iii) all officers and regular employees of the municipalities of the Commonwealth; and (iv) all officers and regular employees of participating public corporations. As of June 30, 2007, the System's active membership totaled approximately 176,837 participating employees, with a total of 99,851 retirees and beneficiaries as of such date.

As of June 30, 2007, the System owned net assets held in trust for pension benefits totaling \$2,891,501,000. The System has the authority to transact all of its business, invest its funds and hold its securities and other properties in its own name. The Act specifically authorizes the System to borrow money, including through the direct placement of debt, and secure any such borrowing with its own assets.

# Changes in the structure of the System

At its inception, the System was structured as a defined benefit plan. In a defined benefit plan, the members of the plan are entitled to retirement benefits which are defined and determinable. Those retirement benefits could be, as it was the case of the System prior to the 1999 amendments, previously defined by a statute. As of June 30, 2007, 207,107 Members were participating employees, retirees and beneficiaries of the defined benefit plan, and, therefore, entitled to receive retirement benefits that were expressly defined in the Act.

In February 1990, the Act was amended to reduce future pension liabilities of the System. Said amendments provided, among other things, for an increase in the level of contributions to the System and limited the retirement benefits for new Members by increasing the number of years of service required for vesting certain benefits and reducing the level of benefits in the case of early retirement. Disability and death benefits were also reduced for new Members as a result of these amendments.

In 1999, the Act was further amended to provide that all persons who became Members of the System on or after January 1, 2000, would no longer be entitled to participate in the defined benefit plan, and would instead participate in a defined contribution plan established by such amendment to the Act. A defined contribution plan is a retirement plan that provides for an individual account for each participant and for benefits based solely upon the amount contributed to the participant's account and any income, expenses, gains and losses, and any forfeitures of accounts of other participants which may be allocated to such participant's account. This change in the structure of the System responded primarily to the need of the System to address its large actuarial deficit.

Among the factors that contributed to the deficit were: (i) the historical undercapitalization of the System, (ii) increases in certain post-employment benefits were not properly funded and (iii) the System assets have consistently been insufficient to satisfy the System's obligations. By converting the System

into a defined contribution plan, the System would no longer be responsible for covering future deficits. Under the defined contribution plan, each Member would have an individual account, in which the contributions made by such Member will be deposited into. When the Member retires, the Administrator disburses the amount deposited in such Member's account in accordance with the provisions of the Act.

# SUMMARY OF HISTORICAL ACCOUNTING DATA (dollars in thousands)

		Fisca	ıl Year Ended Ju	ne 30,	
	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
Additions <sup>(1)</sup> Deductions <sup>(2)</sup> Net (Decrease) Increase <sup>(3)</sup>	\$ 663,883	\$ 951,894	\$ 981,777	\$1,073,839	\$1,253,124
	696,158	757,854	795,348	860,379	902,954
	(32,275)	194,040	186,429	213,460	350,170
Net Assets	1,947,402	2,141,442	2,327,871	2,541,331	2,891,501
Total Assets	1,989,345	2,234,947	2,502,958	2,776,142	2,931,300
Total Cash and Investments <sup>(4)</sup>	1,905,355	2,130,094	2,403,094	2,652,988	2,778,189

Source: Audited Financial Statements of the Employees Retirement System

## **Benefits to Members**

The System provides retirement and other benefits to its Members under various plans, the requirements and benefits of which are described below.

# **Normal and Deferred Retirement Benefits**

The following table sets forth the various age and years of service requirements for the normal and deferred retirement benefits available to Members who fulfill each of those requirements. The minimum pension benefit set by the Puerto Rico Legislature is \$400 per month. Only those Members who entered into the System prior to January 1, 2000 are entitled to receive the retirement benefits described below. Other benefits such as loans and life insurance, however, are available to all Members. For purposes of computing retirement and disability benefits, the term "average compensation" shall mean the average salary for the three highest paid years of employment.

Additions consist of employer and employee contributions, investment income, special law contributions, insurance premiums on loans to members and other income.

Deductions include retirement and disability annuities, death and other benefits, refunded employer contributions, refunded participating employee contributions, insurance claims on loans to plan members and general, administrative and interest expenses.

<sup>(3)</sup> Net (Decrease) Increase is equal to the excess of revenues over expenses reduced by net amounts transferred to other retirement systems.

<sup>(4)</sup> Investments are comprised of interest bearing accounts, marketable securities and Member loans. This amount reflects the fair market value of investments, net of premiums and discounts.

## BENEFIT VESTING TABLE

<u>Years of Service</u>	Minimum Age <u>Requirement</u>	Retirement Benefits
Not less than 30	55	75% of the average compensation.
Not less than 30	Less than 55	65% of the average compensation.
Less than 30, but not less than 25	55	The average compensation multiplied by a factor of 1.5% and by the number of years of service credited up to 20 years, plus the average compensation multiplied by a factor of 2% and by the number of years of services credited in excess of 20 years.
Less than 25, but not less than 10	58	The average compensation multiplied by a factor of 1.5% and by the number of years of service credited up to 20 years, plus the average compensation multiplied by a factor of 2% and by the number of years of services credited in excess of 20 years.

A Member who terminates service before the age of 58 and who has completed 10 but less than 25 years of service is vested in a deferred retirement annuity payable beginning at least at age 58. Those Members of the System who were employed by the Puerto Rico Police Department or the Puerto Rico Firefighters Corp have the option to receive a deferred annuity if they are at least 50 years old and have completed at least 25 years of service.

Retired Members are free to work with private entities but cannot work on a full-time basis with the Commonwealth.

After resignation or removal from service, Members may request immediate reimbursement of all contributions made by them. Members are required by the Act to contribute a percentage of their salary to the System. Members must effectuate such statutory contributions until they retire or resign. The Act grants the Secretary of the Treasury or any paying agent of the System the authority to withhold a portion of each Member's salary and transfer the amount so withheld to the System. Any outstanding debt of such Member with the System is deducted from such contributions prior to making the reimbursement. The vested right to receive a deferred annuity is forfeited if the Member's accumulated contributions are refunded upon such Member's request.

## Disability Retirement Benefits

Disability retirement benefits are available to Members who have made contributions to the System for at least 10 years. Disability retirement annuities are computed as follows: the average compensation multiplied by a factor of 1.5% and by the number of years of service credited up to 20 years, plus the average compensation multiplied by a factor of 2% and by the number of years of service credited in excess of 20 years. Members who elect to receive benefits under this plan are severely restricted from seeking employment.

# Pre-Retirement Death Benefits

Beneficiaries of a Member who dies prior to retirement are entitled to a refund of such Member's accumulated contributions, plus a lump sum payment equal to one year's salary for the position that the Member was holding at the time of death.

Post-Retirement Death Benefits

Beneficiaries of a Member who dies while receiving retirement benefits will receive all contributions not received by the Member, to the extent the survivors of the Member are not entitled to receive an annuity from the System. The minimum post-retirement death benefit set by the Puerto Rico Legislature is \$750.00.

Summary of Benefits Paid by the System

The following table sets forth the amounts and types of benefits paid by the System during the five-year period ended June 30, 2007:

## **BENEFITS SUMMARY**

		As of Fiscal Year Ended June 30 (In Thousands)  2003 2004 2005 2006 2007								
	<u>2003</u>									
Annuity Benefits <sup>(1)</sup>	\$614,500	\$672,578	\$713,814	\$772,647	\$800,786					
Death Benefits	12,370	11,099	10,894	14,984	13,872					
Benefits under Law 127 <sup>(2)</sup>	17,931	14,553	14,731	16,684	17,000					
Total	\$644,801	\$698,230	\$739,439	\$804,315	\$831,658					

Source: Audited Financial Statements of the Employees Retirement System

Loans

The System offers Members mortgage, personal and cultural trip loans.

The System may grant a Member a mortgage loan if the following conditions are met: (i) the mortgage loan is for the purpose of building, acquiring, expanding or refinancing such Member's home; (ii) the mortgage loan is not greater than three times the combined annual salary of Member and such Member's spouse; (iii) the mortgage loan does not exceed 90% of the value of the real estate property to be acquired or built and the maximum amortization term may not exceed 30 years; and (iv) the mortgage loan is secured by a first mortgage on the real property which is being built, acquired, expanded or refinanced. The Board has the responsibility of setting the maximum amount that the System may lend to a Member.

The Act provides that the System may invest its assets by means of granting personal loans to its Members. Personal loans may only be granted to provide Members with a source of financing the down payment for a home, which home shall be for the exclusive use of the Member to whom the personal loan was granted.

Cultural trip loans are low interest loans granted to Members who have worked for one of the Government Employers for at least one year. Members who comply with this requirement may borrow up to the total amount contributed by them to the System to cover the cost incurred in connection with cultural travel.

<sup>(1)</sup> Annuity Benefits consist of retirement, merit and disability annuities.

<sup>(2)</sup> Law 127 provides for the payment of death and disability benefits for certain employees of the Police Department, the Firefighters Corp, the Administration of Correctional Facilities, the Puerto Rico National Guard and the Treasury Department.

#### Insurance

The System provides life insurance that guarantees the payment of the outstanding principal balance of mortgage, personal and cultural trip loans in case of the death of a Member. Members who obtained these loans from the System pay the coverage in its entirety. The life insurance rates are actuarially determined and do not vary by age, sex or health status.

# **Investments**

The Act provides that the System may invest all its assets not used to cover operational and administrative expenses. Said investments may be made in certain types of securities. The Act authorizes the System to invest in fixed income securities, in capital stock of any corporation organized under the laws of the Commonwealth, any state of the United States of America or any foreign jurisdiction and in risk capital. The Act also provides that the System may invest up to 15% of its assets in income-yielding real estate and restricts the amount of assets which the System may invest in foreign jurisdictions. At present, the System may only invest up to 30% of its assets in foreign jurisdictions.

The System's Board of Trustees has investment authority and sole fiduciary responsibility for the management of the System's assets. The Board is guided by the System's Investment Committee, management, and the staff in the Actuarial Studies and Investments Office who carry out the daily activities of the investment program.

The System's goal is to efficiently and effectively manage investments to achieve the highest possible return at an acceptable level of risk. The System's investment portfolio is diversified into several asset classes, so that over the long run any weaknesses in one area are offset by gains in another. The Board follows a strategic asset allocation policy that targets the percentage of funds to be invested in each asset class.

The System's investments are managed in accordance with the Statement of Investment Guidelines for Public Plans set forth by the Government Development Bank.

The table below describes the System's investment portfolio at fair value.

# **INVESTMENT PORTFOLIO**

	As of Fiscal Year Ended June 30 (In Thousands)						
	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>		
Fixed Income Securities							
Bonds and Notes of the US Federal Government	\$ 44,425	\$ 23,325	\$ 99,462	\$ 91,706	\$ 96,879		
Corporate Bonds	173,668	83,116	66,978	63,119	52,760		
Capital Stock							
US Equity	719,525	866,200	865,857	948,269	1,137,987		
Non-US Equity	225,379	296,562	334,275	428,632	555,157		
Alternative Investments							
Private Equity Investments	34,089	41,632	41,244	41,609	47,784		
Total	\$ 1,197,086	\$ 1,310,835	\$ 1,407,816	\$ 1,573,335	\$1,890,567		

Source: Audited Financial Statements of the Employees Retirement System

# Summary of Loan Portfolio

The following table sets forth by categories the principal amount of loans made by the System to Members during the five-fiscal year period ended June 30, 2007:

# **LOAN PORTFOLIO**

		As of Fiscal Year Ended June 30, 2007								
			(In Thousands)	1						
	2003	<u>2004</u>	<u>2005</u>	<u>2006</u>	2007					
Mortgage Loans	\$ 65,436	\$ 72,375	\$ 82,295	\$ 96,544	\$ 107,680					
Personal Loans	203,083	286,944	362,668	405,756	439,854					
Cultural Trip Loans	13,277	16,245	19,750	23,762	27,813					
Total	\$ 281,796	\$ 375,564	\$ 464,713	\$ 526,062	\$ 575,347					

Source: Audited Financial Statements of the Employees Retirement System



# Employees Retirement System of the Government of the Commonwealth of Puerto Rico (ERS): Covered Payroll Outlook

Submitted to: ERS

Prepared by: Global Insight, Inc.

June 26, 2008

(2008-2059)

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# **Executive Summary**

Global Insight (GII) has developed a model to forecast the total payroll of those government employees that participate in the Employees Retirement System of the Government of the Commonwealth of Puerto Rico (ERS). This econometric model, coupled with our long term forecast of the Puerto Rico economy, has been used to project the total number of employees that will participate in the ERS as well as their average wage from fiscal year 2008 through fiscal year 2059. Our Baseline forecast indicates that in fiscal year 2059, the total covered payroll will amount to US\$39.5 billion. Between fiscal years 2008 and 2059 the average annual growth rate of the covered payroll is projected to be 4.5%. We also present alternative forecasts that project higher and lower paths of the covered payroll. Under these, less likely, scenarios we forecast that by fiscal year 2059, the total covered payroll could be as low as US\$32 billion, if the government undergoes a major downsizing, and as high as US\$63.7 billion, in a scenario were an investment boom drives rapid economic growth.

Our model was constructed from widely accepted economic principles and Global Insight's long experience in building econometric forecasting models. After extensive analysis, we found the following Puerto Rico macroeconomic variables to be effective in building an empirical model of total employment and average wages in the ERS participating sector: total government employment, real GNP, labor productivity, and the unemployment rate. The projections and forecasts are based on future paths of these factors as predicted by GII's Macroeconomic Model of Puerto Rico, which in turn is fed by GII's U.S. Macroeconomic Model.

# **Disclaimer**

The projections, forecasts and other forward looking information included in this report, including, but not limited to, those regarding future Government of Puerto Rico employment and wage levels, are estimates, which have been prepared on the basis of certain assumptions and hypotheses. No representation or warranty of any kind is or can be made with respect to the accuracy or completeness of, and no representation or warranty should be inferred from, these projections, forecasts and other forward looking information. The projections, forecasts and other forward looking information contained in this report are based upon assumptions as to future events and, accordingly, are subject to varying degrees of uncertainty. Some assumptions inevitably will not materialize and, additionally, unanticipated events and circumstances may occur. Therefore, for example, actual future Government of Puerto Rico payrolls inevitably will vary from the projections, forecasts and other forward looking information included in this report and the variations may be material and adverse.

# Introduction

The goal of this research is to forecast the total payroll of those government employees that participate in the Employees Retirement System of the Government of the Commonwealth of Puerto Rico (ERS), over the next 51 years. In order to achieve this Global Insight has developed a model, which, coupled with our long-term forecast for the Puerto Rico economy, allows us to forecast the total number of ERS participating employees, as well as their average wage.

The ERS is the administrator of a cost-sharing, multiple-employer, retirement system established by the Commonwealth of Puerto Rico. The ERS was created under the Act 447, and became effective on January 1, 1952. The ERS covers all regular employees of the Commonwealth's central government, municipalities and certain public corporations not covered by their own retirement's systems. On September 24, 1999, Act No. 447, was amended for the purpose of establishing a new pension program (System 2000), which is a hybrid defined contribution plan, also known as a cash balance plan. In fiscal year 2007, the ERS reported 176,837 active participants in all ERS plans.

This report is organized as follows: In Chapter 1, we discuss in detail our baseline forecast for the main macroeconomic factors that drive employment and wages in the government sector. Our baseline forecast assumes that there will be no major structural change in the Puerto Rican economy over the foreseeable future. We also assume that government policy continues as in the past, without significant government restructuring. Chapter 2 describes the econometric model used to project total employment and average wages in the ERS participating sector. The baseline forecast for total covered payroll is discussed and analyzed in relation to total government employment and wages in Chapter 3. Finally, in Chapter 4 we discuss alternative projections of the total covered payroll.

# Chapter 1

# **Macroeconomic Environment**

# **Economic Growth**

# A. Context and Recent Developments

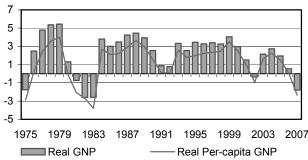
Puerto Rico is a self-governing commonwealth of the United States, yet its economic growth and development have traditionally been slower than that of the U.S. mainland. Although it does raise its own taxes, Puerto Rico has no independent monetary or trade policy. U.S. government transfers buoy local consumption, and U.S. demand influences tourism activity and manufacturing production on the island, as the majority of Puerto Rico's import-export trade is with the United States. As a result, economic performance in the Commonwealth is strongly influenced by the U.S. business cycle.

<sup>&</sup>lt;sup>1</sup> For a detailed description of the Puerto Rico government's main retirement systems, as well as an overview of the government structure, please see the "Paper on Structure of Government of Puerto Rico and its Principal Retirement Systems" prepared by HCalero Consulting Group Inc.

Robust U.S. demand and high levels of consumer and business confidence boosted Puerto Rico's annual average real growth rate to 3% in 1995-2001, from 2% in the preceding 15 years. From the second half of 2000 economic activity slowed, however, and in fiscal year 2002, the Commonwealth slipped into recession due in part to the terrorist attacks of September 11, 2001 and their effect on U.S. demand and tourism. Although the recession was relatively mild – real GNP contracted 0.3% – it has been followed by a period of sluggish growth. In 2001-07 average annual real growth was just 0.9%. Although historically, domestic factors have played a secondary role in the island's economic performance, over the last two years the island's ongoing fiscal crisis has been the main factor behind the economic slowdown.

## **Economic Growth: Historical Trends**

(Percent change from a year earlier)



Although in fiscal year (FY) 2004, thanks to stronger U.S. growth, the Puerto Rico economy seemed to be gaining momentum, high oil and food prices, an ongoing fiscal crisis, and a political impasse between the governor and the legislature have since had a negative impact on economic activity in the Commonwealth. In fiscal 2005, real GNP, which is most often used as a measure of growth in the local economy because, unlike GDP, it nets out the large flows of earnings accruing to non-Puerto Rico residents, i.e. U.S. corporations established on the island, expanded 1.9%, down from 2.7% in fiscal 2004. Real GDP was up 0.6%, down from 3.0% a year earlier. In fiscal 2006 slow growth continued (real GNP inched up 0.5%) and turned into a recession in fiscal 2007 when real GNP contracted 1.8%, while real GDP dropped 1.6%. High inflation, rising interest rates on the back of the U.S. Federal Reserve (Fed)'s monetary tightening, and high unemployment rates continued to impose constraints on the dynamics of real private consumption, which expanded only 1.7%, a similar rate to 2006 but down from 3.6% in fiscal 2005. Meanwhile, real fixed investment dropped for the third consecutive year, as worries about the fiscal retrenchment of the government and credit downgrades continued to weigh on business confidence. Government consumption, restricted by fiscal austerity measures needed to contain the widening deficit, was practically stagnant, growing 0.1% in real terms, while net trade continued to make a negative contribution to GNP, as exports of goods and services decreased 3.2%, while imports were up 0.4%, both in real terms.

## **B.** Current Trends Scenario (Baseline Forecast)

In fiscal year 2008, Global Insight estimates that economic activity on the island remained in recession, with real GNP contracting by more than 2%. Through their effect on disposable income, elevated inflation levels, due to the gradual pass-through of high global oil prices to other goods and services, have continued to take a toll on private consumption. Private investment is also believed to have remained slow because of weak investor confidence and still-high interest rates at the beginning of the year. On the external front, the Commonwealth's export sector was undoubtedly hurt by the marked slowdown in the U.S. economy. In fiscal 2009, the slow

improvement of public-sector finances, the fiscal stimulus from the U.S. Federal Government, and the continued easing of monetary policy in the United States will help reverse the economic contraction, marking the beginning of a gradual recovery. Still, private investment and household spending growth are expected to remain moderate as consumer and business confidence levels begin to recover but only slowly. Meanwhile, although the government will continue to fund some capital investment projects, such as the construction of new sports venues for the 2010 Central American and Caribbean Games, fiscal austerity measures needed to address the fiscal crisis will limit the public sector's ability to stimulate economic growth over the near term.

Over the medium-term, we estimate average real GNP growth around 3.0%, slowing to 2.0% by 2030. During the remainder of the forecast period growth will continue to decelerate due to unfavorable demographic trends, reaching 1.5% by 2059. This means that in the long-run economic growth in Puerto Rico will continue to lag behind that in the U.S. mainland. Puerto Rico will, however, continue to have one of the highest GDP per capita in Latin America.

Puerto Rico is one of the most open economies in the world, with free mobility of goods, services, capital, and labor to the vast U.S. market. The stability provided by this high degree of integration with the U.S., along with a highly skilled labor force and higher quality infrastructure than that of most emerging economies, create a relatively strong business environment that will support real economic growth in the long term.

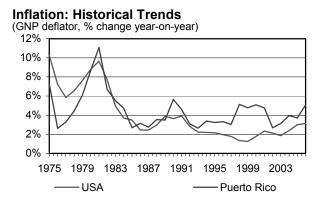
Still, a number of structural issues will continue to prevent long-term real growth above 3%. Although Puerto Rico has a good record of educational development, the existence of a number of government transfer programs funded mainly by the U.S. federal government, and the fact that Puerto Rico is subject to U.S. minimum wage legislation, will continue to constrain labor force participation rates, while maintaining unemployment levels high, thus limiting the contribution of human capital to long-term growth. Moreover, the rate of capital accumulation in Puerto Rico has not been sufficiently fast to support vigorous medium- and long-term growth. The fixed investment-to-GDP ratio fell from close to 30% in the early 1970s to less than 15% recently, due mainly to declining private investment. This problem will be exacerbated by the recent elimination of the tax advantages under Section 936 of the U.S. Internal Revenue Code. Due to a weak domestic savings rate, investment in Puerto Rico has been largely financed by foreign sources, attracted by strong incentives under section 936 to reinvest earnings in the Commonwealth. With the cancellation of the section 936 provisions, the relaxation of U.S. trade barriers, and the emergence of many other tax havens around the world, some advantages Puerto Rico has had in the past thanks to its close association with the U.S. are fading. As a result, in order for Puerto Rico to improve its long-term growth outlook, it will have to find new ways to attract foreign investment to the island, as well as promoting the development of island-based businesses that can create new job opportunities. To this end, the government is trying to accelerate Puerto Rico's insertion into the knowledge economy by promoting research and development in the biotechnology, computing and information technology and aerospace industries in particular.

# Inflation

## A. Context and Recent Developments

Price changes in Puerto Rico as measured by the broadest price measure, the implicit GNP deflator, have roughly followed the trend in inflation levels in the United States, peeking in the early 1980s and accelerating recently on the back of high oil prices. Still, since the 1980s overall

prices have consistently increased more rapidly in Puerto Rico than in the U.S. The inflation differential between Puerto Rico and the U.S. widened in the late 1990s, but has since started to converge back to its fifteen year average of 1.5%.



The Puerto Rican Department of Labor recently completed the implementation of a new CPI for the island. The old CPI was often criticized because the basket of goods had not been revised since 1977, and the measure, therefore, normally overstated the real level of prices in the island. The newly released CPI has a base of December 2006. Monthly figures for the new index, which are published by the Puerto Rican Planning Board, are available only from December 2006 forward. As of April 2008 Puerto Rico's 12-month consumer price inflation stands at 8.1%, a much more reasonable rate than the 19.6% rate recorded by the old index in June 2007, and closer to the inflation rate as measured by the GNP deflator, which stood at 5.4% in fiscal 2007.

Despite the revisions, the fact remains that consumer prices have been consistently increasing more rapidly in Puerto Rico than in the United States. The main driver of consumer prices in the island has been the rise of global oil prices. Because the commonwealth is heavily dependent on oil imports to meet its domestic energy needs, particularly for electricity generation, any fluctuation in the price of oil has a significant effect on price levels in the island.

#### **B.** Current Trends Scenario (Baseline Forecast)

Inflation in Puerto Rico will remain high in the near term. The monetary easing by the U.S. Federal Reserve during the second half of 2007 and into 2008 will depress interest rates on the island, fueling stronger domestic demand, and in turn, pressuring inflation. Still, high global oil prices, which are expected to remain prone to significant upward spikes because of the still tight global supply/demand situation, will continue to present the biggest risk to the Commonwealth's inflationary picture in the near term.

Over the medium-term, we expect inflation levels in Puerto Rico will trend down gradually as global oil prices stabilize. In the long-term, we foresee Puerto Rico's inflation converging towards that observed in the United States, in a similar fashion as during the periods 1980-1989 and 1991-1993, before they started to diverge during the rest of the nineties. The high synchronization of Puerto Rico to the American economy, and the use of the same currency (low transaction costs, no exchange-rate risk, and the lack of independent monetary policy) support this view, which, however, requires the fulfillment of certain conditions. First of all, and contrary to the poor fiscal performance that affected domestic prices during the last couple of years, present and future governments would try to pursue a responsible fiscal management, keeping the growth of public debt in line with economic growth, and to avoid unnecessary borrowing that

crowds out private investment. In addition, productivity gains observed in the United States would be equally transferred to Puerto Rico so that any price reduction coming from increasing productivity is replicated on the island. Moreover, increasing competition among producers and distributors on the island, and lower transportation costs would help to slowly reduce any mark-up charged in Puerto Rico with respect to U.S. prices.

# **Demographics and the Labor Market**

## A. Context and Recent Developments

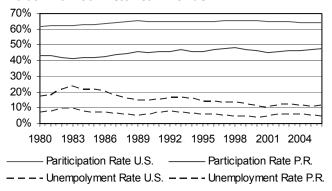
# **Demographics**

Puerto Rico's population, 3.81 million according to the 2000 census, was estimated at 3.94 million in fiscal year 2007, making it one of the most populated islands in the world. Annual average population growth has slowed from 0.9% in the early 1990s to less than 0.5% recently due to declining birth rates and high emigration rates. It is estimated that some 2 million Puerto Rico residents have migrated to the United States. Although life expectancy rates in Puerto Rico (74.5 years for males and 82.5 years for females) have improved significantly in recent years, they remain lower than those in the U.S. mainland due to high rates of poverty on the island, especially in the rural areas. Indeed, according to the 2000 Census, nearly 50% of all Puerto Rico residents live below the poverty line. In recent years, Puerto Rico's age structure has changed as the medical care system improved. As death rates decline, the proportion of the population over 65 years of age has increased; in fiscal 2007, it is estimated that people over 65 made up 13.2% of the population. However, the proportion of children under 16 has remained fairly constant at about 25%.

#### **Labor Markets**

Historically, the unemployment rate has been significantly higher in Puerto Rico than in the United States, and the labor force participation rate has been much lower. According to the Puerto Rico household survey, in fiscal 2007, the island's labor force amounted to 1.41 million, representing around 47% of the working-age population, well below the U.S. mainland's 65%. Even with these low labor force participation rates, Puerto Rico's average unemployment rate of 10.4% in fiscal 2007 was more than double the U.S. national average.

#### **Labor Market: Historical Trends**



As the economy has not been able to provide sufficient jobs in the private sector, the government is a primary source of employment, placing a heavy burden on the Commonwealth's financial accounts. According to the United States' Bureau of Labor Statistics (BLS) Establishment Survey,

in fiscal 2007, the Puerto Rico government employed 298,125 people, or 23.6% of the total employed population.

# **B.** Current Trends Scenario (Baseline Forecast)

Over the near term, unemployment levels in Puerto Rico will remain high. Developments in the labor market are highly dependent on the macro-economy. Thus, the recession during fiscal 2007-2008 and the slow recovery during 2009, will likely constrain hiring, keeping the unemployment rate above 10%.

Beyond the near term, the labor force participation rate in Puerto Rico should trend up gradually. Estimates from the United Nations suggest that Puerto Rico's population will peak in 2044. This will take place very gradually, as the population growth rate—currently close to 0.5% per year—falls to zero over the next 40 years. The labor force, however, is currently growing significantly faster than the population, at roughly 2% per year. This is in part due to the age structure of Puerto Rico: although birth rates are declining, there are far more young people entering the workforce than there are older people retiring from the workforce. As a result, even after the population peaks, the labor force will continue to grow, albeit at a slower pace.

Still, important labor market rigidities will continue to constrain the labor force participation rate in Puerto Rico, keeping it below U.S. levels. Puerto Rico residents are eligible for the same income transfer programs as U.S. residents, such as the Nutrition Assistance Program (NAP, the food stamp program) and disability insurance, which are funded mainly by the U.S. federal government. Because average wages are much lower in Puerto Rico, the benefits these federal programs provide are much more attractive to residents of the island. Since these benefits are not tied to work incentives, they have discouraged participation in the labor force and will continue to do so in the foreseeable future unless they are reformed. Additionally, Puerto Rico is subject to U.S. minimum wage legislation, and as a result, the minimum wage on the island is relatively high when compared to the average wage. This discourages employment in low-productivity positions, while encouraging the informal sector, hindering Puerto Rico's ability to compete in labor-intensive manufacturing sectors.<sup>2</sup> Because we do not expect average wages to catch up to those in the mainland, this will continue to be problem in the future. Furthermore, an open border to the U.S. has encouraged the migration of Puerto Rico residents seeking higher wage employment in the mainland.

# Chapter 2

# **Econometric Model**

An econometric model is a set of mathematical equations which best statistically describes the available historical data. It can be applied, with assumptions on the projected path of independent explanatory variables, to predict the future path of the dependent variable being studied. In this case, in order to forecast the payroll of those government employers that participate in the ERS, we are interested in predicting the future path of the total number of ERS participating employees, as well as their average wage.

<sup>&</sup>lt;sup>2</sup> Because the mandated minimum wage is relatively high when compared to the average wage in the island, it makes hiring low-skilled workers relatively costly for firms. This makes labor-intensive industries in Puerto Rico uncompetitive when compared to other low-wage countries, in both Latin America and Asia.

After extensive analysis of available data measuring all of the factors which influence the Puerto Rico labor market, we found the following Puerto Rico macroeconomic variables to be effective in building an empirical model of the total employment and average wages in the ERS participating sector:

- 1) Total government employment,
- 2) Real GNP,
- 3) Labor productivity, and
- 4) Unemployment rate.

We used the tools of standard multivariate regression analysis to determine the nature of the economic relationship between these variables and total employment and average wages in the ERS participating sector. We then projected the total payroll in the ERS participating sector out to fiscal year 2059, using these relationships, along with Global Insight's (GII) Macroeconomic Model of Puerto Rico, which in turn is fed by GII's U.S. Macroeconomic Model. The latter consists of over 2000 simultaneous equations of which approximately one third are stochastic equations. Puerto Rico's model is a smaller one with approximately 100 equations, distributed between stochastic and identities in the same proportion as the US model.

# **Total Employment in the ERS Participating Sector**

Total employment in the ERS participating sector (EERS) was determined to be a function of total government employment (EG) and real national output (GNPR). The following equation was estimated over the period from 1989 to 2006.<sup>3</sup>

$$\log (EERS) = -0.711 + 0.499 * \log (EG) + 0.338 * \log (GNPR) [-1]$$

The model was estimated in logarithmic form, which is standard practice in the time series analysis of variables which grow over time. It also allows the direct computation of the responsiveness (or elasticity) of the dependent variable (total employment in the ERS) to changes in the various explanatory (or the right hand side) variables. The equation was adjusted using the Cochrane-Orcutt iterative method to correct for autocorrelation, a statistical relation that would otherwise bias coefficient estimates in this case.

This model has an R-square in excess of 0.82, meaning that it explains more than 82% of the variation in total employment in the ERS participating sector over the 1989 to 2006 period. In terms of explanatory power this indicates a strong model with a high level of statistical significance.

## **Explanatory Variables**

Total government employment

Data for total government employment in Puerto Rico are available from the U.S. Bureau of Labor Statistics' Establishment Survey at a monthly frequency since 1980. Total government employment represents nearly one-fourth of total employment in Puerto Rico, while employment in the ERS participating sector represents more than 50% of total government employment. Total

<sup>&</sup>lt;sup>3</sup> Total government employment and ERS employment are measured in thousands of employees and real GNP is measured in millions of 1954 U.S. dollars.

government employment captures the essence of fiscal policy in Puerto Rico, which in turn will influence the path of total employment in the ERS participating sector.

The coefficient on EG in the regression equation measures the elasticity of total employment in the ERS sector with respect to total government employment. Specifically, every percent increase in total government employment has raised employment in the ERS sector by 0.499%. The estimated coefficient (0.499) is significantly different from zero at the 90% confidence level, which means there is significant explanatory power in total government employment to account for variations in total employment in the ERS sector.

#### Real GNP

Puerto Rico's real GNP is most often used as a measure of growth in the local economy because, unlike GDP, it nets out the large flows of earnings accruing to non-Puerto Rico residents, i.e., U.S. corporations established on the island. Data on real GNP are available at an annual frequency from the Puerto Rico Planning Board as far back as 1970. Over the long term real GNP growth in our Puerto Rico macroeconomic model is driven by labor productivity, demographic trends, fixed capital formation and growth in the U.S. economy, which is in turn determined by Global Insight's U.S. macroeconomic model.

As expected, the coefficient on GNPR in the regression equation indicates a positive correlation between employment in the ERS sector and economic growth. If the economy grows more quickly, it will require an increase in the supply of goods and services provided by the government, leading to an increase in government employment.

The econometric model states that every percent increase in real GNP in the previous year has raised employment in the ERS sector by 0.338%. Our model establishes a lag between changes in the level of economic activity and the supply of public goods and services, i.e., the increase in government employment is not immediate. Fiscal rigidities imposed by the budgetary process can delay the adjustment of government employment to changes in economic activity. Statistical results validate this specification. The estimated coefficient (0.338) is significantly different from zero at the 95% confidence level, which means there is a significant correlation between real GNP and employment and total employment in the ERS sector.

# Average Wage in the ERS Participating Sector

To forecast the average wage of ERS participating employees, we first derived the real average wage using the GNP deflator. Average real wages in the ERS participating sector (COMERSR) are then derived as a function of the unemployment rate (RU) and total labor productivity (LPE). The following equation was estimated over the period from 1989 to 2006.

$$log(COMERSR) = 6.214 + 1.089 * log(LPE)[-1] - 0.011 * RU$$

Once again, the model was estimated in logarithmic form, since that allows the easy computation of elasticity of the dependent variable (real wages in the ERS sector) to changes in the various explanatory variables. This model has an R-square in excess of 0.77, meaning that it explains more than 77% of the variation in average real wages in the ERS participating sector over the 1989 to 2006 period. In terms of explanatory power this indicates a strong model with a high level of statistical significance.

The nominal average wage is calculated from the real average wage using our inflation forecast as measured by the GNP price deflator, as follows:

Nominal Average Wage = Real Average Rate \* GNP deflator

# **Explanatory Variables**

Labor Productivity

Labor productivity is the measure of output per employee. We calculate labor productivity as real GNP divided by total employment, derived from annual data published by the Puerto Rico Planning Board. A rise in labor productivity lowers the cost of labor at a given level of wages and benefits, and as a result, firms will find it profitable to expand employment. As the new technological innovations that boost productivity occur, new industries arise, along with the creation of new jobs. The increased demand for labor will tend to boost wages, as firms compete to hire additional workers, and raise total employment.

In our model, a one percent increase in productivity in the previous year increases the real average wage in the ERS participating sector by 1.089%. The specification of the model defines a lag between changes in productivity and its effects on real wages. It is a common practice by the government and also by private corporations to revise wages and salaries once a year, based on recent past performance. Statistical results validate this specification. The estimated coefficient (1.089) is significantly different from zero at the 95% confidence level, which means there is a significant correlation between labor productivity and averages wages in the ERS sector.

## **Unemployment Rate**

Puerto Rico's annual unemployment rate is reported by the Puerto Rico Planning Board dating back to 1973. Over the long-term, the number of unemployed and the unemployment rate are determined as identities from the employment and labor force projections of our Puerto Rico macroeconomic model, which are in turn a function of demographic trends and long-term labor productivity.

Standard labor market theory tells us that excess labor supply will exert downward pressure on wages. A rising unemployment rate indicates an excess in labor supply, we would thus expect the coefficient on RU to be negative. Indeed, our model indicates that a one percent increase in unemployment has lowered average wages in the ERS participating sector by 0.011%. The estimated coefficient (0.011) is significantly different from zero at the 80% confidence level.

# Chapter 3

# **Results**

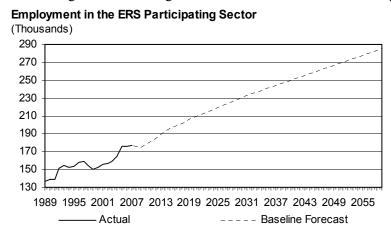
After developing the two regression equations specified above, we used them to project the total employment and average wage in the ERS participating sector of the government for the period between fiscal years 2008 and 2059. The total covered payroll is then calculated as:

Total Payroll = Total Number of Employees \* Average Wage

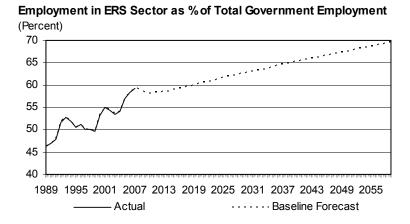
In using regression equations developed on the basis of historical data to project future values of the dependent variable, we must also assume that the underlying economic structure captured in the equation will remain essentially the same. While past performance is no guarantee of future patterns, it is still the best tool we have to make such projections.

# **Total Employment in the ERS Participating Sector**

The graph below displays the projected time trend of total headcount in the ERS participating sector over the next 51 years. Our baseline forecast indicates that total employment in the ERS sector will grow at an average annual rate of 1.0% between fiscal years 2008 and 2059.



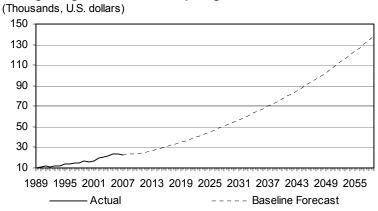
This forecast implies that, over the long-run, employment in the ERS participating sector as a percent of total government headcount will maintain the ongoing upward trend. Employment in the ERS sector as a percent of total government employment has been trending up from 46% in fiscal 1989, to almost 60% recently. By fiscal year 2059 we expect headcount in the participating sector will amount to more than 65% of total employment in the public sector.



# Average Wage in the ERS Participating Sector

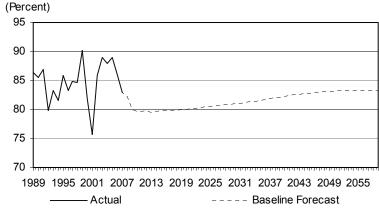
The graph below displays the projected time trend of average wages in the ERS participating sector over the next 51 years. Our baseline forecast indicates that average wages in the ERS sector will grow at an average annual rate of 3.5% between fiscal years 2008 and 2059. This results from a 1.2% average annual growth in real wages, and a 2.3% average inflation rate.

## Average Wage in the ERS Participating Sector



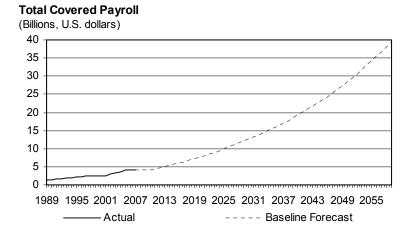
Over the forecast horizon wages in the ERS participating sector will continue to grow at fairly similar rates to those of average wages in the total government sector.

# Average Wage in ERS Sector as $\%\,\text{of}$ Average Government Wage

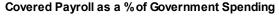


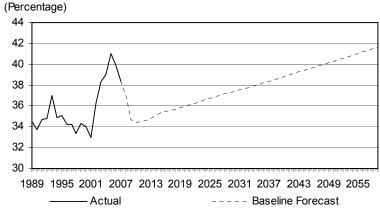
# **Total Covered Payroll**

Using the forecasted employment and wage figures we calculated the total payroll in the ERS participating sector. Our baseline forecast indicates that the total covered payroll will grow at an average annual rate of 4.5% between fiscal years 2008 and 2059, reaching US\$39.5 billion in fiscal year 2059.



After averaging 34% over the 1989-2001 period, the covered payroll as a percent of total government spending on an National Income Accounts basis began to trend up in 2002, reaching a historical high of 41% in fiscal year 2005. In the near term, we expect the normalization of this ratio, already evident in fiscal 2006 and 2007, will continue, bringing the covered payroll's share of government spending to less than 35% by fiscal 2010. This is consistent with the ongoing government efforts to reduce the burden of the payroll on the fiscal accounts. Over the medium and long-term the covered payroll as a percent of total government spending will gradually trend up to around 42%.





# **Changes from Previous Forecast**

In the January 2008 publication of this report, Global Insight projected the total covered payroll would amount to US\$40.9 billion by fiscal year 2059, posting an average annual growth rate of 4.6%. The downward revision in our current payroll forecast is a result of the revision of the forecast for the four explanatory variables used in our model: total government employment, real GNP, labor productivity, and the unemployment rate.

Since our last forecast, the Puerto Rican Planning Board published real GNP figures for fiscal year 2007 and revised the data for fiscal 2005 and 2006 downward. The new figures reveal that

in fiscal 2007 the economy contracted more than expected, with real GNP falling 1.8% (compared to 1.7% in our Baseline Forecast). Moreover, the outlook for the Puerto Rican economy over the near-term has deteriorated significantly, as the U.S. recession unfolds and oil prices continue trending higher. As described in Chapter 1, the Commonwealth is now expected to see yet another year of negative growth in fiscal 2008, pushing the expected recovery back to fiscal 2009. Still, in fiscal 2009, growth in both the U.S. and Puerto Rico is forecasted to be weaker than previously expected. With a lower growth path for economic activity, employment growth in the Commonwealth will be curtailed, resulting in higher unemployment levels over the medium term. Indeed, the unemployment rate is now expected to peak at 11.4% in fiscal year 2009 (compared to a peak of 11.0% in fiscal 2008 in our previous forecast).

The downward revision of the explanatory variables has resulted in a lower payroll forecast. Employment in the ERS participating sector is now expected to reach 285 thousand in 2059, down 0.2% from our previous forecast (286 thousand). Average wages in the ERS sector are now expected to reach US\$138,664, down from US\$143,282 in our previous baseline forecast.

# Chapter 4

# **Alternative Forecasts**

Two sources of variance may appear in the forecast derived by our model. First, as detailed in the Explanatory Variables sections, there is some degree of forecast error in the parameters of the model. Second, the time paths of the explanatory variables may differ from our Baseline Forecast assumptions. In this chapter, we discuss three alternative forecasts and their effect on the total payroll in the ERS participating sector, in order to provide an interval forecast. The results of these scenarios are summarized in Table1 and displayed in the graph below.

## **Take-off Scenario**

Under the "Take-off" scenario, a marked increase in investment results in higher labor productivity and an acceleration of real economic growth in Puerto Rico over the medium and long term. Thanks to vigorous investment by both the public and private sectors, under this scenario, Puerto Rico's investment-to-GDP ratio will reach 16.5% by 2011, and will accelerate further to a peak of 18.9% by 2037, declining only slightly to 18.5% by 2059. As a result, average real GNP growth reaches 5.0% by 2011 (compared to 3.6% in the "Current Trends" scenario) and peaks at 6.0% in 2017, then decelerating gradually to around 2.0% by 2059. This means that in the long-run, Puerto Rico will catch up to the U.S. mainland in terms of GDP per capita, which is consistent with the government's expectation of convergence.

The government sector will invest nearly US\$8.8 billion over the period between 2008 and 2011, in accordance with the Capital Investment Program (Program de Inversiones de Cuatro Años or PICA), which sets aside US\$4.3 billion for social development and US\$4.4 billion for economic development. Among planned investments are the completion of the Plan Vial for Puerto Rico, the expansion of the San Juan metro system (Tren Urbano), the development of the land around the old Roosevelt Rose Base in the municipality of Ceiba, and the construction of new plants by the Puerto Rico Electric Power Authority (PREPA). Meanwhile, private sector investment will be especially robust in the manufacturing, tourism and telecommunications sectors. Planned

private investments include the expansion of the Amgen and Elli Lilly pharmaceutical plants, the construction of new hotels, and a multi-million dollar investment by the telecommunications company América Móvil following its acquisition of Verizon Communications' Puerto Rico operations. Additionally, the government, together with the private sector, will try to further promote and develop Puerto Rico's biotechnology, computing and information technology and aerospace industries.

Under this scenario, as government efficiency increases and the private sector grows, the government is able to undergo a significant restructuring, easing the burden on the island's fiscal accounts that has resulted from the elevated government payroll. Specifically, government employment is reduced by 4.9% over the next five years, and subsequently remains unchanged until fiscal year 2020. After this period, government employment grows at an average rate of 0.13% per year. As a result, total government employment as a percent of total employment, falls to 14.0% by 2059. However, because higher productivity will lead to faster wage growth in all sectors, the reduction in government employment is more than offset by higher government wages. Thus, the covered payroll reaches US\$63.7 billion in fiscal year 2059.

# **Low Inflation Scenario (Low Case 1)**

Under this scenario, inflation in Puerto Rico converges more rapidly to U.S. levels than expected. The inflation differential between the U.S. and Puerto Rico is completely eliminated over the next ten years. As a result, the covered payroll reaches only US\$33.6 billion in fiscal year 2059.

# **Significant Government Downsizing (Low Case 2)**

As one alternative policy scenario, we assume that the Puerto Rico government will undergo a major restructuring. Employment in the public sector as a percentage of total employment in the Commonwealth has been trending down from more than 30% in the early eighties to around 24% recently. In our baseline forecast, we assume this trend will continue into the future, so that by fiscal year 2059, government employment will represent 19.2% of total employment. The elevated government payroll has placed a heavy burden on the Commonwealth's financial accounts, however, and fiscal pressures could prompt the government to implement a more rapid downsizing of the public sector.

Currently, on average, in the 50 U.S. states, government employment represents around 14% of total employment. In this scenario, we assume that government employment in Puerto Rico, as a percent of total employment, will reach a level similar to that of the 50 U.S. states over the next ten years, falling from 24% in 2006 to 14.2% by 2018. Over the following forty years, the share of government employment in Puerto Rico will follow the gradual downward trend expected on average for the 50 U.S. states. This scenario results in a covered payroll of US\$32.0 billion in fiscal year 2059.

# Constant ERS Employment as a Share of Government Employment Scenario (Low Case 3)

In our baseline forecast, over the long-run, employment in the ERS participating sector as a percent of total government headcount will maintain the ongoing upward trend, reaching 69% by fiscal year 2059. In this scenario, we assume that the share of ERS employment in total government employment will instead remain constant, at its 2006 level (58.4%). This results in a total covered payroll amounting to US\$33.1 billion in fiscal year 2059.

# Case:17-03283-LTS Doc#:7554-21 Filed:06/21/19 Entered:06/21/19 21:37:57 Desc: Exhibit U Page 134 of 217

**Table 1. Alternative Forecast Summary** 

	Total Covered	Average Annual	Average Annual	Average Annual
	Payroll in 2059	Increase in	Increase in	Increase in Wages
	(billions US\$)	Payroll (%)	Headcount (%)	(%)
Baseline	39.5	4.5	1.0	3.5
Take-off	63.7	5.5	0.3	5.1
Low Case 1	33.6	4.2	1.0	3.2
Low Case 2	32.0	4.1	0.5	3.5
Low Case 3	33.1	4.1	0.6	3.5

**Table 1: Main Macroeconomic Concepts: Baseline Forecast** 

c 1. ivia	III IVIAC	200011	omic C	oncepts	. Dasci	
	Million Real		GN	NP		
	1954 US		Million US			
Fiscal Years 1989	Dollars 4807.70	% Change 3.94	Dollars 19954.20	% Change 7.57	Deflator 415.05	Inflation 3.50
1909	4929.80	2.54	21619.10	8.34	438.54	5.66
1991	4972.80	0.87	22809.00	5.50	458.68	4.59
1992	5011.50	0.78	23696.40	3.89	472.84	3.09
1993	5177.80	3.32	25132.90	6.06	485.40	2.66
1994 1995	5308.90 5491.80	2.53 3.45	26640.90 28452.30	6.00 6.80	501.82 518.09	3.38 3.24
1996	5671.23	3.27	30356.95	6.69	535.28	3.32
1997	5864.16	3.40	32342.71	6.54	551.53	3.04
1998 1999	6054.70 6300.06	3.25 4.05	35110.66 38281.15	8.56 9.03	579.89 607.63	5.14 4.78
2000	6487.10	2.97	41418.58	8.20	638.48	5.08
2001	6585.14	1.51	44046.56	6.34	668.88	4.76
2002	6562.55	-0.34	45071.32	2.33	686.80	2.68
2003 2004	6702.73 6886.20	2.14 2.74	47479.42 50708.70	5.34 6.80	708.36 736.38	3.14 3.96
2004	7019.62	1.94	53752.39	6.00	765.74	3.99
2006	7057.56	0.54	56732.89	5.54	803.86	4.98
2007	6930.80	-1.80	58712.37	3.49	847.12	5.38
2008	6767.87	-2.35	60634.05 64053.92	3.27	895.91	5.76
2009 2010	6924.12 7176.15	2.31 3.64	64053.92 68157.90	5.64 6.41	925.08 949.78	3.26 2.67
2011	7435.39	3.61	72268.03	6.03	971.95	2.33
2012	7706.55	3.65	76716.20	6.16	995.47	2.42
2013	7989.57	3.67	81463.39	6.19	1019.62	2.43
2014 2015	8259.93 8499.04	3.38 2.89	86408.31 91406.47	6.07 5.78	1046.11 1075.49	2.60 2.81
2016	8722.58	2.63	96551.62	5.63	1106.92	2.92
2017	8948.74	2.59	101885.05	5.52	1138.54	2.86
2018	9177.29	2.55	107443.94	5.46	1170.76	2.83
2019 2020	9412.25 9650.11	2.56 2.53	113266.51 119331.21	5.42 5.35	1203.39 1236.58	2.79 2.76
2021	9889.62	2.48	125606.82	5.26	1270.09	2.71
2022	10129.40	2.42	132087.80	5.16	1304.00	2.67
2023	10367.70	2.35	138735.61	5.03	1338.15	2.62
2024 2025	10604.61 10843.18	2.29 2.25	145548.63 152561.51	4.91 4.82	1372.50 1406.98	2.57 2.51
2026	11081.84	2.20	159786.14	4.74	1441.87	2.48
2027	11319.41	2.14	167212.11	4.65	1477.22	2.45
2028	11558.00	2.11	174829.38	4.56	1512.63	2.40
2029 2030	11796.61 12035.18	2.06 2.02	182628.13 190623.78	4.46 4.38	1548.14 1583.89	2.35 2.31
2031	12273.80	1.98	198790.54	4.28	1619.63	2.26
2032	12513.60	1.95	207126.92	4.19	1655.21	2.20
2033	12751.98	1.90	215619.06	4.10	1690.87	2.15
2034 2035	12990.24 13227.58	1.87 1.83	224248.22 233015.30	4.00 3.91	1726.28 1761.59	2.09 2.05
2036	13464.25	1.79	241885.58	3.81	1796.50	1.98
2037	13699.23	1.75	250868.83	3.71	1831.26	1.93
2038	13933.67	1.71	260010.88	3.64	1866.06	1.90
2039 2040	14172.48 14413.98	1.71 1.70	269602.47 279493.18	3.69 3.67	1902.30 1939.04	1.94 1.93
2040	14658.14	1.69	289689.30	3.65	1976.30	1.92
2042	14904.96	1.68	300199.07	3.63	2014.09	1.91
2043	15154.46	1.67	311028.26	3.61	2052.39	1.90
2044 2045	15406.62 15661.43	1.66 1.65	322186.29 333676.91	3.59 3.57	2091.22 2130.57	1.89 1.88
2046	15918.89	1.64	345510.82	3.55	2170.44	1.87
2047	16179.00	1.63	357694.65	3.53	2210.86	1.86
2048	16441.72	1.62	370233.91	3.51	2251.80	1.85
2049 2050	16707.08 16975.06	1.61 1.60	383137.83 396413.49	3.49 3.46	2293.27 2335.27	1.84 1.83
2051	17245.63	1.59	410069.73	3.44	2377.82	1.82
2052	17518.78	1.58	424112.28	3.42	2420.90	1.81
2053	17794.51	1.57	438548.60	3.40	2464.52	1.80
2054 2055	18072.80 18353.63	1.56 1.55	453388.05 468635.96	3.38 3.36	2508.68 2553.37	1.79 1.78
2056	18637.00	1.54	484302.35	3.34	2598.61	1.77
2057	18922.88	1.53	500396.17	3.32	2644.40	1.76
2058	19211.25	1.52	516919.25	3.30	2690.71	1.75
2059	19502.07	1.51	533878.91	3.28	2737.55	1.74

Table 1: Main Macroeconomic Concepts: Baseline Forecast (Continued)

391200 0 0.05 224500 1.04 5090 110800 2.290 45.05 19100 14.44 54.05 19100 1.05 17.05 15.05		T UDIC I		1,140100	conom	ic Concepts: Baseline		Forceast (Cor		itiliucu)		
Trousands	Popul	lation	Work	ing Age Pop.	(16 +)		Labor Force		Unemployment		Emplo	yment
					% of Total							
\$393.00	Thousands	% Change	Thousands	% Change		Thousands	% Change		Thousands	Unemp. Rate	Thousands	% Change
395.00   0.77   295.50   1.70   71.07   119.00   2.46   45.81   175.00   15.19   397.00   1.00   295.00   0.00   295.00   1.00   71.4   119.00   1.50   46.11   19.00   1.60   977.00   0.00   396.80   0.07   296.00   1.76   72.10   120.00   0.17   46.11   19.00   1.60   19.00   996.00   396.87   1.44   296.40   1.76   72.30   120.00   0.17   46.11   19.00   1.60   19.00   19.00   396.87   1.44   296.40   1.76   72.30   120.00   1.50   46.86   202.00   1.60   19.00   19.00   397.00   1.17   72.40   120.00   0.17   46.11   19.00   19.00   19.30   19.00   19.30   19.00   19.30   19.00   19.30   19.00   19.30   19.00   19.30   19.00   19.30   19.00   19.30   19.30   19.00   19.30   19.30   19.00   19.30												4.29
3980.00												1.58
3968.00 0.70 2268.00 1.70 07.74.50 1201.00 2.65 48.86 202.00 19.82 5990.00 1.70 072 200.00 1.70 1.70 1.70 1.70 1.70 1.70 1.70												1.45
Select   144												0.00 2.25
3666,17												1.20
3770.27 0.76 2740.0 1.37 72.31 1397.00 2.26 4.750 170.00 13.1 192.00 3760.50 0.54 2774.00 1.37 73.45 1320.0 1.70 1.70 140.0 180.0 13.66 13.00 0.1 376 73.45 1320.0 1.50 147.00 1.00 1.00 13.6 13.00 0.1 376 73.45 1320.0 1.00 1.00 1.00 13.6 13.00 0.0 1.36 300.0 1.00 1.00 1.00 13.5 13.5 13.5 13.5 13.5 13.00 0.1 1.00 1.00 1.00 13.00 1												3.96
3770.27 0.76 2743.00 1.37 72.75 1319.00 1.70 48.00 180.00 11.01 1130.00 10 380799 0.54 27400 1.13 73.18 139.00 1.00 4.00 11.07 4.01 11.00 11.09 11.00 0.00 13.00 13.00 10.00 3807.00 10.52 2816.00 0.68 73.67 1272.00 1.00 46.10 142.00 10.99 11.00 11.00 13.00 10.00 3827.00 0.52 2816.00 1.60 7.3 37 1272.00 1.00 45.30 11.0	3703.88	1.03	2685.00	1.17	72.49	1268.00	4.02	47.23	175.00	13.80	1093.00	4.00
3807.50 0.04 0.2774.00 1.13 73.8 1308.00 0.08 47.08 183.00 12.04 1143.00 0.0 0.3827.85 0.52 2818.00 0.08 73.87 1278.00 1.108 4.159.00 1.09 1150.00 0.0 3827.85 0.52 2818.00 1.80 73.87 1278.00 1.108 4.579 143.00 11.09 1150.00 0.0 3828.85 0.52 2818.00 1.80 73.87 1278.00 1.108 4.579 143.00 11.09 1150.00 0.0 3828.85 0.52 2818.00 1.80 73.87 1278.00 1.108 4.579 143.00 11.09 1150.00 0.0 3828.85 0.50 0.50 2002.00 1.80 75.30 1301.00 2.50 4.579 143.00 11.09 1150.00 0.0 1.3828.35 0.0 0.47 2229.00 0.02 3.75 5.30 1301.00 0.07 4.04 4.77 150.00 11.39 1150.00 0.1 3808.65 0.43 2245.00 0.05 5.75 4.5 1355.00 1.0 0.07 4.04 4.77 150.00 11.05 11.23 0.0 0.5 3919.92 0.42 2272.00 0.02 75.82 1422.00 2.07 4.76 160.00 11.07 10.05 11.23 0.0 0.0 1.3841.53 0.55 3002.02 1.01 76.16 1410.00 3.084 46.07 147.00 10.45 1223.00 0.0 3963.14 0.05 3001.05 0.00 76.00 1425.44 1.00 3.04 46.07 147.00 10.45 1223.00 0.0 3963.14 0.05 3001.05 0.00 76.00 1425.44 1.00 3.04 46.07 147.00 10.45 1223.00 0.0 1402.22 1.05 3384.67 0.54 3001.05 0.00 76.02 1425.44 1.00 4.02 14.					72.31			47.93		13.11		3.11
3827.86 0.52 286.00 0.08 73.87 (202.00 1.07 46.19 142.00 10.96 1150.00 0.08 384.83 1 0.52 286.00 0.08 73.87 (202.00 1.08 45.38 13.00 1.06 11.07 11.00 1.00 11.00 11.00 11.00 11.00 11.00 11.00 1.00 11												1.06
3827.86   0.52   2816.00   1.60   1												0.35
3888.87												0.61 -0.52
3886.867												0.70
3993.45												3.13
394153 0.55 30020 2 1017 76.16 1410.00 0.84 46.97 147.00 10.32 1283.00 1 3963.14 0.55 3031.85 0.99 76.00 1425.44 1.00 4.70 147.00 10.32 1283.00 1 3984.87 0.55 3031.85 0.99 76.00 1425.44 1.00 4.70 150.34 11.21 1283.00 0 2 4 4000.00 0.54 3080.25 0.92 77.11 1494.26 2.35 4.70 150.34 11.21 1283.00 0 2 4 4007.21 0.55 3180.35 0.88 77.86 150.85 2.35 4.76 5 169.30 11.10 1223.00 2 2 4007.21 0.55 3180.35 0.88 77.36 150.28 1 2.31 40.06 153.17 10.05 1395.64 2 2 45 48.07 169.37 11.03 1328.00 2 2 4007.21 0.55 3180.30 0.88 77.36 150.28 1 2.31 40.06 153.17 10.25 1401.65 2 4009.20 0.51 3167.12 0.70 7.78 1 1501.06 2.17 40.71 160.11 10.25 1401.65 2 4009.20 0.51 3167.12 0.70 7.78 1 1501.06 2.17 40.71 160.11 10.25 1401.65 2 4009.20 0.51 3167.12 0.70 7.78 1 1623.70 1.85 150.00 150.70 9.47 1400.07 2 4009.20 0.50 3100.11 0.70 7.88 15 1644.28 1.22 15.20 148.82 8.04 1496.83 1 142.25 0.04 149.25 0.04 149.25 0.04 149.25 0.04 149.25 0.05 12	3886.69	0.47	2929.00	0.93	75.36	1361.00	0.67	46.47	155.00	11.39	1206.00	1.52
3981 45   0.55   3002 02   1.01   76.16   1410.00   0.84   46.97   147.00   10.43   1283.00   0.98   3083.18   0.99   76.50   1455.64   0.47   0.47   0.54   3081.05   0.98   76.50   1455.65   2.33   47.65   166.50   11.40   1282.00   2.40   4006.02   0.54   3089.03   0.92   77.11   1489.02   2.35   4.84   48.97   164.77   11.00   1329.00   2.40   4006.02   0.55   3114.24   0.84   77.62   1561.96   2.17   49.71   160.11   10.25   1401.08   2.47   4.86   4.86   4.87   4.97   1.90   1.90   1.40   4.90	3903.45	0.43	2945.00	0.55	75.45	1385.00	1.76	47.03	147.00	10.61	1238.00	2.65
3985.3 t												1.45
3998.47												0.56
4006.02												0.21 2.10
4047.27   0.53   316.35   0.88   77.38   1528.81   2.31   49.06   163.17   10.67   1365.64   2.40   4049.02   0.51   3142.42   0.79   77.83   1594.14   2.06   50.33   157.92   9.91   1436.22   2.4099.02   0.51   3167.12   0.79   77.83   1594.14   2.06   50.33   157.92   9.91   1436.22   2.4099.02   0.50   3190.11   0.75   77.80   1623.70   1.85   50.30   157.92   9.91   1436.22   2.4099.04   0.50   3190.11   0.75   77.80   1623.70   1.85   50.30   157.92   9.91   1436.22   2.4099.04   1495.63   1.409.04   2.40												2.10
4088.02												2.72
4098.40												2.65
4109.26	4069.02	0.51	3167.12	0.79	77.83	1594.14	2.06	50.33	157.92	9.91	1436.22	2.45
4128.57												2.35
4447.26												1.75
4165.44 0.44 3263.08 0.46 78.34 1705.54 1.14 52.27 147.43 8.64 1558.11 1 1 4183.00 0.42 3278.02 0.46 78.37 1724.43 1.11 52.81 146.14 8.47 1578.29 1 1 4200.00 0.41 3292.68 0.45 78.40 1742.89 1.07 52.93 144.81 8.31 1598.08 1 1 4261.89 0.39 3307.25 0.44 78.44 1761.01 1.04 53.25 143.45 8.15 1617.56 1 1 4232.12 0.37 3321.64 0.44 78.44 1778.76 1.01 53.55 142.32 8.00 1636.44 1 4247.17 0.36 3335.85 0.44 78.54 1786.11 0.98 53.84 141.13 7.86 1658.96 1 4261.47 0.34 3349.84 0.42 78.61 1813.08 0.94 54.12 139.97 7.72 1673.10 1 4274.99 0.32 3365.53 0.41 78.68 1629.61 0.91 54.40 183.08 7.72 1673.10 1 4287.71 0.30 3376.99 0.40 78.76 1845.72 0.88 54.60 137.28 7.72 1673.10 1 4289.62 0.28 339.02.5 0.39 78.55 1861.46 0.85 54.91 137.28 7.44 1708.44 139.20 0.28 3403.23 0.38 78.95 1861.46 0.85 54.91 137.71 7.29 1725.74 1 4320.65 0.22 3415.77 0.37 79.06 1892.16 0.94 55.40 133.43 7.05 1758.76 0.43 4320.65 0.22 3415.77 0.37 79.06 1892.16 0.94 55.40 133.43 7.05 1758.76 0.43 4320.65 0.22 3415.77 0.37 79.06 1892.16 0.80 55.40 133.43 7.05 1758.76 0.43 4320.65 0.22 3415.77 0.37 79.06 1892.16 0.80 55.40 133.43 7.05 1758.76 0.43 4320.65 0.22 3415.77 0.37 79.06 1892.16 0.80 55.40 133.43 7.05 1758.76 0.43 4320.65 0.22 3415.77 0.37 79.06 1892.16 0.80 55.40 133.43 7.05 1758.76 0.43 4320.65 0.22 3415.77 0.37 79.06 1892.16 0.80 55.40 133.43 7.05 1758.76 0.43 4320.65 0.21 3427.61 0.35 79.77 190.67 1 0.77 55.62 131.90 6.92 1774.81 0.43 4340.44 0.16 3450.22 0.32 79.42 1933.96 0.69 56.05 120.23 76.64 1805.99 0.44 3450.36 0.12 3470.46 0.22 79.68 1982.76 0.66 56.25 126.65 6.50 1820.22 0.43 4355.76 0.12 3470.46 0.22 79.68 1982.76 0.66 56.25 126.45 6.50 1820.22 0.43 4355.76 0.12 3470.46 0.22 79.82 1969.57 0.55 56.60 121.69 6.18 1847.88 0.43 4360.26 0.07 3496.67 0.08 3498.55 0.25 79.55 1969.67 0.08 56.05 126.67 6.50 1820.22 0.34 4355.86 0.12 3470.45 0.22 79.82 1969.57 0.55 56.60 121.69 6.18 1847.88 0.43 4360.60 0.07 3496.67 0.07 3536.00 0.48 56.00 0.48 57.77 10.04 4.95 3.90 0.49 1877.79 0.00 3536.31 0.00 3537.31 0.00 3537.31 0.00 3537.31 0.00 3537.31 0.00 353												1.42 1.37
4200.00 0.42 3278.02 0.46 78.37 1724.43 1.11 52.21 146.14 8.47 1578.20 1 4200.00 0.41 3292.68 0.45 78.40 1742.89 1.07 52.93 144.81 8.31 1598.08 1 4216.39 0.39 3307.25 0.44 78.44 1761.01 1.04 53.25 143.45 8.15 1617.56 1 4232.12 0.37 3321.64 0.44 78.49 1778.76 1.01 53.55 142.32 8.00 1636.44 1 4247.17 0.36 3335.86 0.43 78.54 1796.11 0.98 53.84 141.13 7.86 1654.96 1 4261.47 0.34 3349.84 0.42 78.61 1813.08 0.94 54.12 139.97 7.72 1673.10 1 4274.99 0.32 3363.55 0.41 78.68 1829.61 0.91 54.40 139.57 7.72 1673.10 1 4278.99 0.22 3376.99 0.40 78.76 1845.72 0.88 54.66 137.28 7.44 1708.44 1 4298.62 0.28 3390.25 0.39 78.85 1861.46 0.85 54.91 135.71 7.29 1725.74 1 4310.63 0.26 3403.23 0.38 78.95 1877.08 0.84 55.16 134.71 7.18 1742.37 0 4320.65 0.23 3415.77 0.37 79.06 1892.18 0.80 55.40 133.43 7.05 1758.76 0 4320.65 0.23 3415.77 0.37 79.06 1892.18 0.80 55.40 133.43 7.05 1758.76 0 4320.65 0.21 3427.81 0.55 79.17 1906.71 0.77 55.62 133.90 6.92 1774.81 0.43 437.55 0.18 3439.20 0.33 79.92 1920.03 0.73 55.84 130.16 6.78 1790.47 0 4350.38 0.14 3460.61 0.39 79.55 1946.67 0.66 56.25 126.45 6.50 1820.22 0.32 79.42 1933.95 0.69 56.05 128.37 6.64 1800.50 0.44 3450.81 0.34 79.78 0.79 199.06 199.15 10.55 56.00 121.37 0.60 1880.50 0.90 1347.78 0.02 1435.40 0.12 3470.40 0.28 79.88 1988.78 0.62 56.55 126.45 6.50 1820.22 0.34 1436.81 0.38 79.95 1946.67 0.66 56.25 126.45 6.50 1820.22 0.34 1437.80 0.28 1438.37 0.05 56.00 1347.78 0.02 1437.78 0.02												1.37
4200.00												1.30
4232.12 0.37 3321.64 0.44 78.49 1778.76 1.01 53.55 142.32 8.00 1636.44 1 4247.17 0.36 3336.85 0.43 78.54 1796.11 0.98 53.55 142.32 8.00 1636.44 1 4247.17 0.36 3358.85 0.43 78.54 1796.11 10.98 53.55 142.32 8.00 1636.44 1 4247.17 0.36 3358.85 0.41 78.68 11813.08 0.94 54.12 139.97 7.72 1673.10 1 4274.99 0.32 3365.53 0.41 78.68 1829.91 0.91 54.40 138.55 7.57 1691.07 1 4274.99 0.32 3365.53 0.41 78.68 1829.91 0.91 54.40 138.55 7.57 1691.07 1 4279.962 0.28 3390.25 0.39 78.85 1861.46 0.85 54.91 135.71 7.28 1725.74 1 1708.44 1 1429.62 0.28 3390.25 0.39 78.85 1861.46 0.85 54.91 135.71 7.29 1725.74 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1												1.25
4247.17 0.36 3335.85 0.43 78.54 1796.11 0.98 53.84 141.13 7.86 1654.98 1 4261.47 0.34 3349.84 0.42 78.61 1813.08 0.94 54.12 139.97 7.72 1673.10 1 4287.74 99 0.32 3363.53 0.41 76.88 1829.61 0.94 54.04 133.53 7.57 1691.07 1 4287.71 0.30 3376.99 0.40 78.76 1845.72 0.88 54.66 137.28 7.44 1708.44 1 4299.62 0.28 3390.25 0.39 78.85 1861.46 0.85 54.91 137.28 7.44 1708.44 1 4390.63 0.26 3403.23 0.36 78.95 1877.08 0.84 55.16 134.71 7.18 1742.37 0 4320.65 0.23 3416.77 0.37 79.06 1892.18 0.80 55.40 133.43 7.05 1758.75 0 4320.65 0.23 3416.77 0.37 79.06 1892.18 0.80 55.40 133.43 7.05 1758.75 0 4320.83 0.21 3427.81 0.35 79.17 1906.71 0.77 55.62 133.43 7.05 1758.75 0 4344.44 0.16 3450.22 0.32 79.42 1933.96 0.69 55.05 128.37 6.64 1805.59 0 4350.38 0.14 3460.61 0.30 79.55 1946.67 0.66 56.25 128.37 6.64 1805.59 0 4350.38 0.14 3460.61 0.30 79.55 1946.67 0.66 56.25 126.45 6.50 1820.22 0 4355.46 0.12 3470.46 0.26 79.68 1958.78 0.62 56.44 124.52 6.36 1820.22 0 4360.78 19.78	4216.39	0.39	3307.25	0.44	78.44	1761.01	1.04	53.25	143.45	8.15	1617.56	1.22
426147 0.34 3349.84 0.42 78.61 1813.06 0.94 54.12 139.97 7.72 1673.10 1 4274.99 0.32 3363.53 0.41 78.68 1829.61 0.91 54.40 139.57 7.72 1673.10 1 4287.71 0.30 3376.99 0.40 78.76 1845.72 0.88 54.66 137.28 7.74 1708.44 1 1 429.62 0.28 3390.25 0.39 78.85 1861.46 0.85 54.91 135.71 7.29 1725.74 1 4310.63 0.26 3403.23 0.38 78.95 1861.46 0.85 54.91 135.71 7.29 1725.74 1 4320.65 0.23 3415.77 0.37 79.06 1892.18 0.80 55.40 133.43 7.05 1758.75 0 0 4329.63 0.21 3427.81 0.35 79.17 1906.71 0.77 55.62 131.90 6.92 1774.81 0 0 4337.55 0.18 3439.29 0.33 79.99 1920.63 0.73 55.84 139.06 6.78 1790.47 0 4355.66 0.12 3470.46 0.28 79.68 198.76 0.06 56.25 126.45 6.50 1820.22 0 4355.76 0.10 3479.78 0.27 79.82 1969.57 0.55 56.60 128.37 6.64 1805.59 0 4368.37 0.08 3488.55 0.25 79.95 1979.74 0.52 56.75 118.70 6.00 1861.04 0.00 4368.55 0.25 79.95 1979.74 0.52 56.75 118.70 6.00 1861.04 0.00 4379.78 0.23 79.92 1999.15 0.48 67.05 115.51 581 1874.09 0.43 4370.46 0.28 79.96 1998.75 0.55 56.60 121.89 6.18 1847.88 0 4366.37 0.08 3488.55 0.25 79.95 1979.74 0.52 56.75 118.70 6.00 1861.04 0.43 1436.65 0.07 3496.73 0.23 80.09 1999.05 0.55 56.60 115.51 581 1874.09 0.43 4370.46 0.18 6.08 1847.89 0.03 3511.31 0.20 80.34 200.89 0.49 57.21 100.04 5.51 115.51 581 1874.09 0.03 3511.31 0.20 80.34 200.89 0.49 57.21 100.47 4.93 1937.95 0.43 4373.73 0.00 3528.38 0.14 80.68 2038.43 0.49 57.57 100.15 5.99 1925.41 0.43 4373.73 0.00 3536.31 0.10 80.85 2028.56 0.49 57.77 100.47 4.93 1937.95 0.43 4373.73 0.00 3536.31 0.10 80.85 2058.33 0.48 59.51 85.82 4.07 2022.41 0.43 4373.73 0.00 3536.31 0.10 80.85 2058.33 0.48 59.51 85.82 4.07 2022.41 0.43 4373.73 0.00 3536.31 0.10 80.85 2058.33 0.48 59.51 85.82 4.07 2022.41 0.43 4373.73 0.00 3536.31 0.10 80.85 2058.33 0.48 59.51 85.82 4.07 2022.41 0.43 4373.73 0.00 3536.31 0.10 80.85 2058.33 0.48 59.51 85.82 4.07 2022.41 0.43 4373.73 0.00 3536.31 0.10 80.85 2058.33 0.48 59.51 85.82 4.07 2022.41 0.43 4376.67 0.00 3534.30 0.00 8354.31 0.01 81.07 208.77 208.77 9.99 9.90 9.00 3542.81 0.00 8542.81 0.00 850.81 202.83 0.48 59.51 85.82 4.	4232.12	0.37	3321.64	0.44	78.49	1778.76	1.01	53.55	142.32	8.00	1636.44	1.17
4274.99												1.13
4287.71         0.30         3376.99         0.40         78.76         1845.72         0.88         54.66         137.28         7.44         1708.44         1           4299.62         0.28         3390.25         0.39         78.85         1861.46         0.85         54.91         135.71         7.29         1725.74         1           4320.65         0.23         3415.77         0.37         79.06         1892.18         0.80         55.40         133.43         7.05         1758.75         0           4329.63         0.21         3427.81         0.35         79.17         1906.71         0.77         55.62         131.90         6.92         1774.81         0           4337.55         0.18         3439.29         0.33         79.29         1920.63         0.73         55.84         130.16         6.78         1790.47         0           4350.38         0.14         3460.61         0.30         79.55         1946.67         0.66         56.25         122.87         6.64         1805.59         0           4355.76         0.01         3479.78         0.27         79.82         1999.77         0.52         56.65         122.64         6.50         1822.22												1.10
4299.62												1.07 1.03
4310.63												1.03
4329.63												0.96
4337.55         0.18         3439.29         0.33         79.29         1920.63         0.73         55.84         130.16         6.78         1790.47         0           4344.44         0.16         3450.22         0.32         79.42         1933.96         0.69         560.55         128.37         6.64         1805.59         0           4355.38         0.14         3460.61         0.30         79.55         1946.67         0.66         56.25         126.45         6.50         1820.22         0           4355.46         0.12         3470.46         0.28         79.82         1969.57         0.55         56.60         121.69         6.18         1847.88         0           4363.37         0.08         3488.55         0.25         79.95         1979.74         0.52         56.75         118.70         6.00         1861.04         0           4366.26         0.07         3496.73         0.23         80.09         1989.60         0.50         56.90         115.51         5.81         1874.09         0           4370.33         0.04         3511.31         0.20         80.34         2008.92         0.49         57.21         108.91         5.42         1900.01	4320.65	0.23	3415.77	0.37	79.06	1892.18	0.80	55.40	133.43	7.05	1758.75	0.94
4344.44         0.16         3450.22         0.32         79.42         1933.96         0.69         56.05         128.37         6.64         1805.59         0           4350.38         0.14         3460.61         0.30         79.55         1946.67         0.66         56.25         126.45         6.50         1820.22         0           4355.46         0.12         3470.46         0.28         79.68         1958.78         0.62         56.44         124.52         6.36         1834.26         0           4359.78         0.10         3479.78         0.27         79.95         1979.74         0.52         56.75         118.70         6.00         1861.04         0           4366.26         0.07         3496.73         0.23         80.09         1989.60         0.50         56.90         115.51         5.81         1874.09         0           4370.33         0.04         3511.31         0.20         80.34         2008.92         0.49         57.21         108.91         5.42         1900.01         0           4372.70         0.02         3523.35         0.16         80.58         2028.56         0.49         57.57         103.15         5.09         1925.41												0.91
4350.38         0.14         3460.61         0.30         79.55         1946.67         0.66         56.25         126.45         6.50         1820.22         0           4355.46         0.12         3470.46         0.28         79.88         1958.78         0.62         56.44         124.52         6.36         1834.26         0           4363.37         0.08         3488.55         0.25         79.95         1979.74         0.52         56.75         118.70         6.00         1861.04         0           4366.26         0.07         3496.73         0.23         80.09         1989.60         0.50         56.90         115.51         5.81         1874.09         0           4370.33         0.04         3511.31         0.20         80.22         1999.15         0.48         57.05         112.00         5.60         1887.14         0           4370.33         0.04         3511.31         0.20         80.34         2089.92         0.49         57.21         108.91         5.42         1900.01         0           4371.69         0.03         3517.66         0.18         80.46         2018.73         0.49         57.21         108.91         5.42         1900.01												0.88
4355.46         0.12         3470.46         0.28         79.68         1958.78         0.62         56.44         124.52         6.36         1834.26         0           4359.78         0.10         3479.78         0.27         79.82         1969.57         0.55         56.60         121.69         6.18         1847.88         0           4366.26         0.07         3496.73         0.23         80.09         1989.60         0.50         56.90         115.51         5.81         1874.09         0           4366.26         0.07         3496.73         0.23         80.09         1989.60         0.50         56.90         115.51         5.81         1874.09         0           4370.33         0.04         3511.31         0.20         80.34         2008.92         0.49         57.21         108.91         5.42         1900.01         0           4371.69         0.03         3517.66         0.18         80.46         2018.73         0.49         57.57         103.15         5.09         1925.41         0           4372.70         0.02         3523.35         0.16         80.58         2028.56         0.49         57.57         103.15         5.09         1925.41												0.84
4359.78         0.10         3479.78         0.27         79.82         1969.57         0.55         56.60         121.69         6.18         1847.88         0           4363.37         0.08         3488.55         0.25         79.95         1979.74         0.52         56.75         118.70         6.00         1861.04         0           4366.26         0.07         3496.73         0.23         80.09         1989.60         0.50         56.90         115.51         5.81         1874.09         0           4370.33         0.04         3511.31         0.20         80.34         2009.92         0.49         57.21         108.91         5.42         1990.01         0           4371.69         0.03         3517.66         0.18         80.46         2018.73         0.49         57.39         105.97         5.25         1912.76         0           4373.37         0.02         3523.35         0.16         80.58         2028.66         0.49         57.57         103.15         5.09         1925.41         0           4373.37         0.02         3528.38         0.14         80.68         2038.43         0.49         57.77         100.47         4.93         1937.95												0.81 0.77
4363.37         0.08         3488.55         0.25         79.95         1979.74         0.52         56.75         118.70         6.00         1861.04         0           4366.26         0.07         3496.73         0.22         80.09         1989.60         0.50         56.90         115.51         5.81         1874.09         0           4370.33         0.04         3511.31         0.20         80.34         2008.92         0.49         57.21         108.91         5.42         1900.01         0           4371.69         0.03         3517.66         0.18         80.46         2018.73         0.49         57.21         108.91         5.42         1900.01         0           4372.70         0.02         3523.35         0.16         80.58         2028.56         0.49         57.57         103.15         5.09         1925.41         0           4373.72         0.01         3527.71         0.12         80.77         2048.31         0.48         57.98         97.93         4.78         1950.37         0           4373.72         0.01         3536.31         0.10         80.85         2058.23         0.48         57.98         97.93         4.78         1950.37												0.74
4366.26         0.07         3496.73         0.23         80.09         1989.60         0.50         56.90         115.51         5.81         1874.09         0           4368.55         0.05         3504.33         0.22         80.22         1999.15         0.48         57.05         112.00         5.60         1887.14         0           4371.69         0.03         3517.66         0.18         80.46         2018.73         0.49         57.39         105.97         5.25         1912.76         0           4372.70         0.02         3523.35         0.16         80.58         2028.66         0.49         57.57         103.15         5.09         1925.41         0           4373.72         0.02         3528.38         0.14         80.68         2038.43         0.49         57.77         100.47         4.93         1937.95         0           4373.72         0.01         3532.71         0.12         80.77         2048.31         0.48         57.98         97.93         4.78         1950.37         0           4373.42         -0.01         3539.19         0.08         80.93         2068.17         0.48         58.20         95.55         4.64         1962.69												0.71
4370.33         0.04         3511.31         0.20         80.34         2008.92         0.49         57.21         108.91         5.42         1900.01         0           4371.69         0.03         3517.66         0.18         80.46         2018.73         0.49         57.39         105.97         5.25         1912.76         0           4372.70         0.02         3523.35         0.16         80.58         2028.66         0.49         57.57         103.15         5.09         1925.41         0           4373.72         0.01         3532.71         0.12         80.77         2048.31         0.48         57.98         97.93         4.78         1950.37         0           4373.73         0.00         3536.31         0.10         80.85         2058.23         0.48         58.20         95.55         4.64         1962.69         0           4373.42         -0.01         3539.19         0.08         80.93         2068.17         0.48         58.44         93.30         4.51         1974.88         0           4370.79         -0.01         3541.30         0.06         80.98         2078.15         0.48         58.68         91.20         4.39         1986.95			3496.73						115.51			0.70
4371.69         0.03         3517.66         0.18         80.46         2018.73         0.49         57.39         105.97         5.25         1912.76         0           4372.70         0.02         3523.35         0.16         80.58         2028.56         0.49         57.57         103.15         5.09         1925.41         0           4373.72         0.01         3528.38         0.14         80.68         2038.43         0.49         57.77         100.47         4.93         1937.95         0           4373.73         0.01         3532.71         0.12         80.77         2048.31         0.48         57.98         97.93         4.78         1950.37         0           4373.73         0.00         3536.31         0.10         80.85         2058.23         0.48         58.20         95.55         4.64         1962.69         0           4372.79         -0.01         3539.19         0.08         80.93         2068.17         0.48         58.49         93.30         4.51         1974.88         0           4370.67         -0.02         3542.62         0.04         81.03         2088.14         0.48         58.94         89.24         4.27         1998.90												0.70
4372.70         0.02         3523.35         0.16         80.58         2028.56         0.49         57.57         103.15         5.09         1925.41         0           4373.37         0.02         3528.38         0.14         80.68         2038.43         0.49         57.77         100.47         4.93         1937.95         0           4373.72         0.01         3532.71         0.12         80.77         2048.31         0.48         57.98         97.93         4.78         1950.37         0           4373.73         0.00         3536.31         0.10         80.85         2058.23         0.48         58.20         95.55         4.64         1962.69         0           4373.42         -0.01         3539.19         0.08         80.93         2068.17         0.48         58.44         93.30         4.51         1974.88         0           4371.87         -0.02         3542.62         0.04         81.03         2088.14         0.48         58.68         91.20         4.39         1986.95         0           4370.68         -0.03         3542.81         -0.01         81.07         2098.17         0.48         59.22         87.46         4.17         2010.71												0.68
4373.37         0.02         3528.38         0.14         80.68         2038.43         0.49         57.77         100.47         4.93         1937.95         0           4373.72         0.01         3532.71         0.12         80.77         2048.31         0.48         57.98         97.93         4.78         1950.37         0           4373.73         0.00         3536.31         0.10         80.85         2058.23         0.48         58.20         95.55         4.64         1962.69         0           4373.42         -0.01         3539.19         0.08         80.93         2068.17         0.48         58.44         93.30         4.51         1974.88         0           4372.79         -0.01         3541.30         0.06         80.98         2078.15         0.48         58.44         93.30         4.51         1974.88         0           4370.68         -0.02         3542.62         0.04         81.03         2088.14         0.48         58.94         89.24         4.27         1998.90         0           4369.27         -0.03         3542.81         -0.01         81.07         2098.17         0.48         59.22         87.46         4.17         2010.71												0.67
4373.72         0.01         3532.71         0.12         80.77         2048.31         0.48         57.98         97.93         4.78         1950.37         0           4373.73         0.00         3536.31         0.10         80.85         2058.23         0.48         58.20         95.55         4.64         1962.69         0           4373.42         -0.01         3539.19         0.08         80.93         2068.17         0.48         58.44         93.30         4.51         1974.88         0           4372.79         -0.01         3541.30         0.06         80.98         2078.15         0.48         58.68         91.20         4.39         1986.95         0           4371.87         -0.02         3542.62         0.04         81.03         2088.14         0.48         58.94         89.24         4.27         1998.90         0           4370.68         -0.03         3543.13         0.01         81.07         2098.17         0.48         59.22         87.46         4.17         2010.71         0           4367.67         -0.03         3542.81         -0.01         81.09         2118.31         0.48         59.51         85.82         4.07         2022.41												0.66 0.65
4373.73         0.00         3536.31         0.10         80.85         2058.23         0.48         58.20         95.55         4.64         1962.69         0           4373.42         -0.01         3539.19         0.08         80.93         2068.17         0.48         58.44         93.30         4.51         1974.88         0           4372.79         -0.01         3541.30         0.06         80.98         2078.15         0.48         58.68         91.20         4.39         1986.95         0           4370.68         -0.02         3542.62         0.04         81.03         2088.14         0.48         58.94         89.24         4.27         1998.90         0           4370.68         -0.03         3543.13         0.01         81.07         2098.17         0.48         59.22         87.46         4.17         2010.71         0           4369.27         -0.03         3542.81         -0.01         81.08         2108.23         0.48         59.51         85.82         4.07         2022.41         0           4365.89         -0.04         3542.54         0.03         81.14         2128.41         0.48         60.08         83.04         3.90         2045.37												0.65
4373.42         -0.01         3539.19         0.08         80.93         2068.17         0.48         58.44         93.30         4.51         1974.88         0           4372.79         -0.01         3541.30         0.06         80.98         2078.15         0.48         58.68         91.20         4.39         1986.95         0           4371.87         -0.02         3542.62         0.04         81.03         2088.14         0.48         58.94         89.24         4.27         1998.90         0           4370.68         -0.03         3543.13         0.01         81.07         2098.17         0.48         59.22         87.46         4.17         2010.71         0           4369.27         -0.03         3542.81         -0.01         81.08         2108.23         0.48         59.51         85.82         4.07         2022.41         0           4367.67         -0.04         3541.61         -0.03         81.09         2118.31         0.48         59.81         84.35         3.98         2033.96         0           4363.89         -0.04         3542.54         0.03         81.14         2128.41         0.48         60.08         83.04         3.90         2045.37												0.63
4371.87         -0.02         3542.62         0.04         81.03         2088.14         0.48         58.94         89.24         4.27         1998.90         0           4370.68         -0.03         3543.13         0.01         81.07         2098.17         0.48         59.22         87.46         4.17         2010.71         0           4369.27         -0.03         3542.81         -0.01         81.08         2108.23         0.48         59.51         85.82         4.07         2022.41         0           4367.67         -0.04         3541.61         -0.03         81.09         2118.31         0.48         59.81         84.35         3.98         2033.96         0           4368.89         -0.04         3542.54         0.03         81.14         2128.41         0.48         60.08         83.04         3.90         2045.37         0           4363.90         -0.05         3542.02         -0.01         81.17         2138.55         0.48         60.38         81.89         3.83         2056.66         0           4361.68         -0.05         3541.33         -0.02         81.29         2148.71         0.48         60.68         80.93         3.77         2067.78 <td></td> <td>0.62</td>												0.62
4370.68         -0.03         3543.13         0.01         81.07         2098.17         0.48         59.22         87.46         4.17         2010.71         0           4369.27         -0.03         3542.81         -0.01         81.08         2108.23         0.48         59.51         85.82         4.07         2022.41         0           4367.67         -0.04         3541.61         -0.03         81.09         2118.31         0.48         59.81         84.35         3.98         2033.96         0           4365.89         -0.04         3542.54         0.03         81.14         2128.41         0.48         60.08         83.04         3.90         2045.37         0           4363.90         -0.05         3542.02         -0.01         81.17         2138.55         0.48         60.38         81.89         3.83         2056.66         0           4361.68         -0.05         3541.33         -0.02         81.19         2148.71         0.48         60.68         80.93         3.77         2067.78         0           4359.26         -0.06         3540.47         -0.02         81.22         2158.90         0.47         60.98         80.13         3.71         2078.77 </td <td></td> <td>0.61</td>												0.61
4369.27         -0.03         3542.81         -0.01         81.08         2108.23         0.48         59.51         85.82         4.07         2022.41         0           4367.67         -0.04         3541.61         -0.03         81.09         2118.31         0.48         59.81         84.35         3.98         2033.96         0           4365.89         -0.04         3542.54         0.03         81.14         2128.41         0.48         60.08         83.04         3.90         2045.37         0           4363.90         -0.05         3542.02         -0.01         81.17         2138.55         0.48         60.38         81.89         3.83         2056.66         0           4361.68         -0.05         3541.33         -0.02         81.19         2148.71         0.48         60.68         80.93         3.77         2067.78         0           4359.26         -0.06         3540.47         -0.02         81.22         2158.90         0.47         60.98         80.13         3.71         2078.77         0           4356.61         -0.06         3539.42         -0.03         81.24         2169.12         0.47         61.28         79.51         3.67         2089.60<												0.60
4367.67         -0.04         3541.61         -0.03         81.09         2118.31         0.48         59.81         84.35         3.98         2033.96         0           4365.89         -0.04         3542.54         0.03         81.14         2128.41         0.48         60.08         83.04         3.90         2045.37         0           4363.90         -0.05         3542.02         -0.01         81.17         2138.55         0.48         60.38         81.89         3.83         2056.66         0           4361.68         -0.05         3541.33         -0.02         81.19         2148.71         0.48         60.68         80.93         3.77         2067.78         0           4359.26         -0.06         3540.47         -0.02         81.22         2158.90         0.47         60.98         80.13         3.71         2078.77         0           4356.61         -0.06         3539.42         -0.03         81.24         2169.12         0.47         61.28         79.51         3.67         2089.60         0           4353.75         -0.07         3538.19         -0.03         81.27         2179.36         0.47         61.60         79.07         3.63         2100.29<												0.59
4365.89     -0.04     3542.54     0.03     81.14     2128.41     0.48     60.08     83.04     3.90     2045.37     0       4363.90     -0.05     3542.02     -0.01     81.17     2138.55     0.48     60.38     81.89     3.83     2056.66     0       4361.68     -0.05     3541.33     -0.02     81.19     2148.71     0.48     60.68     80.93     3.77     2067.78     0       4359.26     -0.06     3540.47     -0.02     81.22     2158.90     0.47     60.98     80.13     3.71     2078.77     0       4356.61     -0.06     3539.42     -0.03     81.24     2169.12     0.47     61.28     79.51     3.67     2089.60     0       4353.75     -0.07     3538.19     -0.03     81.27     2179.36     0.47     61.60     79.07     3.63     2100.29     0       4350.67     -0.07     3536.80     -0.04     81.29     2189.63     0.47     61.91     78.80     3.60     2110.82     0												0.58
4363.90     -0.05     3542.02     -0.01     81.17     2138.55     0.48     60.38     81.89     3.83     2056.66     0       4361.68     -0.05     3541.33     -0.02     81.19     2148.71     0.48     60.68     80.93     3.77     2067.78     0       4359.26     -0.06     3540.47     -0.02     81.22     2158.90     0.47     60.98     80.13     3.71     2078.77     0       4356.61     -0.06     3539.42     -0.03     81.24     2169.12     0.47     61.28     79.51     3.67     2089.60     0       4353.75     -0.07     3538.19     -0.03     81.27     2179.36     0.47     61.60     79.07     3.63     2100.29     0       4350.67     -0.07     3536.80     -0.04     81.29     2189.63     0.47     61.91     78.80     3.60     2110.82     0												0.57 0.56
4361.68     -0.05     3541.33     -0.02     81.19     2148.71     0.48     60.68     80.93     3.77     2067.78     0       4359.26     -0.06     3540.47     -0.02     81.22     2158.90     0.47     60.98     80.13     3.71     2078.77     0       4356.61     -0.06     3539.42     -0.03     81.24     2169.12     0.47     61.28     79.51     3.67     2089.60     0       4353.75     -0.07     3538.19     -0.03     81.27     2179.36     0.47     61.60     79.07     3.63     2100.29     0       4350.67     -0.07     3536.80     -0.04     81.29     2189.63     0.47     61.91     78.80     3.60     2110.82     0												0.55
4359.26     -0.06     3540.47     -0.02     81.22     2158.90     0.47     60.98     80.13     3.71     2078.77     0       4356.61     -0.06     3539.42     -0.03     81.24     2169.12     0.47     61.28     79.51     3.67     2089.60     0       4353.75     -0.07     3538.19     -0.03     81.27     2179.36     0.47     61.60     79.07     3.63     2100.29     0       4350.67     -0.07     3536.80     -0.04     81.29     2189.63     0.47     61.91     78.80     3.60     2110.82     0												0.54
4353.75     -0.07     3538.19     -0.03     81.27     2179.36     0.47     61.60     79.07     3.63     2100.29     0       4350.67     -0.07     3536.80     -0.04     81.29     2189.63     0.47     61.91     78.80     3.60     2110.82     0												0.53
4350.67 -0.07 3536.80 -0.04 81.29 2189.63 0.47 61.91 78.80 3.60 2110.82 0												0.52
												0.51
[ 4347.38] -0.08[ 3535.22[ -0.04] 81.32[ 2199.93I 0.47 <b>I</b> 62.23 <b>I</b> 78.74I 3.58I 2121.18I 0												0.50
												0.49 0.48

**Table 2: Baseline Forecast** 

			Total ERS Covered			
	E	RS Employer	s	Pay	roll	
	Employment	Average				
Fiscal Years 1989	Thousands	Salary	% Change	Millions USD	% Change	
1969	137.18 138.65	10261.16 10789.61	5.15	1407.59 1495.99	6.28	
1991	139.47	11536.78	6.92	1609.00	7.55	
1992	151.19	11059.08	-4.14	1672.00	3.92	
1993	154.24	12202.00	10.33	1882.00	12.56	
1994 1995	151.94 153.70	12288.15 13578.49	0.71 10.50	1867.00 2087.00	-0.80 11.78	
1995	157.64	14101.93	3.85	2223.00	6.52	
1997	159.60	14805.76	4.99	2363.00	6.30	
1998	154.85	15279.70	3.20	2366.00	0.13	
1999 2000	149.69	17202.33 16147.41	12.58 -6.13	2575.00 2463.40	8.83	
2000	152.56 155.68	16376.10	1.42	2549.50	-4.33 3.50	
2002	156.89	19289.78	17.79	3026.43	18.71	
2003	158.83	21094.43	9.36	3350.49	10.71	
2004	164.13	21637.99	2.58	3551.40	6.00	
2005 2006	175.50 176.34	23512.08 23374.32	8.66 -0.59	4126.46 4121.87	16.19 -0.11	
2007	176.84	22756.74	-2.64	4024.23	-2.37	
2008	175.57	23180.02	1.86	4069.79	1.13	
2009	174.83	23155.86	-0.10	4048.34	-0.53	
2010	177.80	23941.68 24823.14	3.39	4256.78	5.15	
2011 2012	181.46 185.22	24823.14 25820.18	3.68 4.02	4504.52 4782.43	5.82 6.17	
2013	188.96	26863.31	4.04	5076.08	6.14	
2014	192.71	28100.23	4.60	5415.31	6.68	
2015	195.84	29387.95	4.58	5755.31	6.28	
2016 2017	198.43 200.86	30684.87 32055.94	4.41 4.47	6088.75 6438.67	5.79 5.75	
2017	200.86	33498.07	4.47	6809.08	5.75	
2019	205.67	34993.41	4.46	7196.97	5.70	
2020	208.08	36559.03	4.47	7607.07	5.70	
2021	210.47	38178.15	4.43	8035.52	5.63	
2022 2023	212.83 215.17	39839.97 41549.71	4.35 4.29	8479.34 8940.06	5.52 5.43	
2024	217.45	43288.30	4.18	9412.97	5.29	
2025	219.70	45066.04	4.11	9901.13	5.19	
2026	221.92	46885.45	4.04	10404.86	5.09	
2027 2028	224.13 226.28	48770.96 50660.05	4.02 3.87	10930.87 11463.15	5.06 4.87	
2029	228.41	52611.73	3.85	12016.97	4.83	
2030	230.51	54610.70	3.80	12588.44	4.76	
2031	232.58	56650.92	3.74	13176.13	4.67	
2032 2033	234.62 236.63	58725.66 60858.34	3.66	13778.22 14400.67	4.57 4.52	
2033	238.58	63018.67	3.63 3.55	15035.05	4.52	
2035	240.50	65256.45	3.55	15694.46	4.39	
2036	242.39	67525.38	3.48	16367.61	4.29	
2037	244.26	69840.31	3.43	17059.23	4.23	
2038 2039	246.11 247.94	72193.56 74611.63	3.37 3.35	17767.61 18499.46	4.15 4.12	
2039	249.79	77109.25	3.35	19260.92	4.12	
2041	251.64	79675.10	3.33	20049.10	4.09	
2042	253.49	82309.15	3.31	20864.41	4.07	
2043 2044	255.34 257.19	85012.53 87787.29	3.28 3.26	21706.99 22578.31	4.04 4.01	
2044	259.05	90633.44	3.24	23478.75	3.99	
2046	260.91	93552.89	3.22	24408.66	3.96	
2047	262.77	96547.36	3.20	25369.47	3.94	
2048	264.62	99615.12	3.18	26360.54	3.91	
2049 2050	266.48 268.34	102760.95 105983.16	3.16 3.14	27384.14 28439.63	3.88 3.85	
2051	270.20	109284.90	3.12	29528.56	3.83	
2052	272.05	112666.70	3.09	30651.50	3.80	
2053	273.91	116127.04	3.07	31808.47	3.77	
2054 2055	275.76 277.61	119671.21 123296.49	3.05 3.03	33000.95 34228.60	3.75 3.72	
2055	277.61	123296.49	3.03	35493.13	3.72	
2057	281.31	130802.01	2.99	36795.47	3.67	
2058	283.15	134680.38	2.97	38134.17	3.64	
2059	284.97	138664.56	2.96	39515.65	3.62	

Table 3: Take-off Scenario

	Take-off Scenario							
	Real	GNP	Total Gov			ERS Em	ployers	
Fiscal Years	Millions of USD	% Change	Employment Thousands	% Change	Employment Thousands	Average Salary	Total Payroll (Mill. USD)	% Change
1989	4807.70	3.94	297.05	4.05	137.18	10261.16	1407.60	-
1990	4929.80	2.54	294.74	-0.78	138.65	10789.61	1495.99	6.28
1991 1992	4972.80 5011.50	0.87 0.78	291.53 293.26	-1.09 0.59	139.47 151.19	11536.78 11059.08	1609.00 1672.00	7.55 3.92
1992	5177.80	3.32	293.26	-0.27	151.19	12202.00	1882.00	12.56
1994	5308.90	2.53	292.33	-0.05	151.94	12288.15	1867.00	-0.80
1995	5491.80	3.45	303.56	3.84	153.70	13578.49	2087.00	11.78
1996	5671.23	3.27	307.53	1.31	157.64	14101.93	2223.00	6.52
1997 1998	5864.16 6054.70	3.40 3.25	318.89 309.48	3.69 -2.95	159.60 154.85	14805.76 15279.70	2363.00 2366.00	6.30 0.13
1999	6300.06	4.05	302.18	-2.36	149.69	17202.33	2575.00	8.83
2000	6487.10	2.97	286.13	-5.31	152.56	16147.41	2463.40	-4.33
2001	6585.14	1.51	282.73	-1.19	155.68	16376.10	2549.50	3.50
2002 2003	6562.55 6702.73	-0.34 2.14	288.68 297.72	2.10 3.13	156.89 158.83	19289.78 21094.43	3026.43 3350.49	18.71 10.71
2003	6886.20	2.14	303.41	1.91	164.13	21637.99	3551.40	6.00
2005	7019.62	1.94	307.83	1.46	175.50	23512.08	4126.46	16.19
2006	7057.56	0.54	302.49	-1.73	176.34	23374.32	4121.87	-0.11
2007	6930.80	-1.80 -1.86	298.13	-1.44	176.84	22756.74	4024.23	-2.37
2008 2009	6801.56 7102.86	4.43	295.02 292.59	-1.04 -0.82	174.24 170.84	23180.02 23292.52	4038.85 3979.31	0.36 -1.47
2010	7444.81	4.81	290.16	-0.83	168.88	24674.65	4167.13	4.72
2011	7813.74	4.96	287.73	-0.84	167.75	25924.71	4348.75	4.36
2012	8181.12	4.70	285.30	-0.84	166.57	27376.60	4560.06	4.86
2013 2014	8619.77 9099.63	5.36 5.57	282.87 282.87	-0.85 0.00	165.52 165.99	28821.44 30721.92	4770.58 5099.41	4.62 6.89
2015	9627.29	5.80	282.87	0.00	166.80	32920.50	5491.14	7.68
2016	10198.28	5.93	282.87	0.00	167.63	35502.42	5951.11	8.38
2017	10806.66	5.97	282.87	0.00	168.34	38472.10	6476.48	8.83
2018 2019	11420.10 12067.10	5.68 5.67	282.87 282.87	0.00	169.07 169.79	41729.16 45117.51	7055.00 7660.47	8.93 8.58
2019	12748.71	5.65	282.87	0.00	170.54	48770.03	8317.23	8.57
2021	13473.24	5.68	283.24	0.13	171.52	52699.00	9038.74	8.67
2022	14236.39	5.66	283.61	0.13	172.51	56947.25	9823.76	8.69
2023	15028.10	5.56	283.98	0.13	173.49	61521.90	10673.28	8.65
2024 2025	15843.94 16686.11	5.43 5.32	284.35 284.71	0.13 0.13	174.46 175.40	66369.14 71489.97	11578.50 12539.28	8.48 8.30
2026	17547.96	5.17	285.08	0.13	176.36	76884.87	13559.30	8.13
2027	18413.38	4.93	285.45	0.13	177.30	82578.53	14640.91	7.98
2028	19275.78	4.68	285.82	0.13	178.24	88397.21	15755.99	7.62
2029 2030	20126.72 20960.37	4.41 4.14	286.18 286.55	0.13 0.13	179.18 180.11	94385.54 100479.93	16911.99 18097.87	7.34 7.01
2031	21770.36	3.86	286.92	0.13	181.05	106633.71	19305.73	6.67
2032	22550.89	3.59	287.29	0.13	181.98	112791.19	20526.24	6.32
2033	23291.99	3.29	287.66	0.13	182.93	118943.43	21758.56	6.00
2034 2035	23988.71 24632.75	2.99 2.68	288.03 288.40	0.13 0.13	183.88 184.83	124991.68 130977.34	22983.83 24209.08	5.63 5.33
2036	25217.44	2.37	288.77	0.13	185.78	136755.64	25406.81	4.95
2037	25734.22	2.05	289.14	0.13	186.72	142296.09	26569.18	4.58
2038	26259.20	2.04	289.51	0.13	187.63	147524.39	27680.02	4.18
2039 2040	26793.89 27338.45	2.04 2.03	289.88 290.26	0.13 0.13	188.53 189.44	152959.37 158580.63	28837.62 30041.91	4.18 4.18
2040	27893.04	2.03	290.26	0.13	189.44	164388.62	31292.03	4.18
2042	28457.82	2.02	291.00	0.13	191.27	170386.40	32589.05	4.14
2043	29032.96	2.02	291.38	0.13	192.18	176579.11	33935.33	4.13
2044	29618.63	2.02	291.75	0.13	193.10 194.01	182973.72	35331.95	4.12
2045 2046	30214.98 30822.20	2.01 2.01	292.13 292.50	0.13 0.13	194.01	189573.72 196386.35	36780.12 38282.77	4.10 4.09
2047	31440.46	2.01	292.88	0.13	195.86	203418.26	39840.89	4.07
2048	32069.93	2.00	293.25	0.13	196.78	210669.71	41456.14	4.05
2049	32710.79	2.00	293.63	0.13	197.71	218154.27	43130.82	4.04
2050 2051	33363.22 34027.40	1.99 1.99	294.01 294.38	0.13 0.13	198.64 199.57	225872.01 233833.54	44866.72 46666.10	4.02 4.01
2052	34703.53	1.99	294.76	0.13	200.50	242044.25	48530.76	4.00
2053	35393.08	1.99	295.14	0.13	201.44	250505.15	50461.63	3.98
2054	36096.34	1.99	295.52	0.13	202.38	259242.35	52465.38	3.97
2055 2056	36813.58 37545.06	1.99 1.99	295.90 296.28	0.13 0.13	203.32 204.27	268255.71 277558.38	54542.87 56696.97	3.96 3.95
2056	38291.08	1.99	296.26	0.13	204.27	287159.62	58930.45	3.95
2058	39051.92	1.99	297.04	0.13	206.17	297058.53	61245.47	3.93
2059	39827.88	1.99	297.42	0.13	207.14	307311.89	63655.75	3.94

**Table 4: Low Inflation Scenario** 

	Table	7. LUN		on see		
		Low	Inflation Scel	nario (Low Ca		
				EKS EII	ployers	
	GNP		Employment	Average	Total Payroll	
Fiscal Years	Deflator	Inflation	Thousands	Salary	(Mill. USD)	% Change
1989	415.05	3.50	137.18	10261.16	1407.59	0.00
1990	438.54	5.66	138.65	10789.61	1495.99	6.28
1991 1992	458.68 472.84	4.59 3.09	139.47 151.19	11536.78 11059.08	1609.00 1672.00	7.55 3.92
1993	485.40	2.66	154.24	12202.00	1882.00	12.56
1994	501.82	3.38	151.94	12288.15	1867.00	-0.80
1995	518.09	3.24	153.70	13578.49	2087.00	11.78
1996	535.28	3.32	157.64	14101.93	2223.00	6.52
1997	551.53	3.04	159.60	14805.76	2363.00	6.30
1998	579.89	5.14	154.85	15279.70	2366.00	0.13
1999 2000	607.63 638.48	4.78	149.69 152.56	17202.33	2575.00 2463.40	8.83 -4.33
2000	668.88	5.08 4.76	155.68	16147.41 16376.10	2549.50	3.50
2001	686.80	2.68	156.89	19289.78	3026.43	18.71
2003	708.36	3.14	158.83	21094.43	3350.49	10.71
2004	736.38	3.96	164.13	21637.99	3551.40	6.00
2005	765.74	3.99	175.50	23512.08	4126.46	16.19
2006	803.86	4.98	176.34	23374.32	4121.87	-0.11
2007	847.12	5.38	176.84	22756.74	4024.23	-2.37
2008 2009	887.13	4.72	175.57 174.83	22952.94 23019.60	4029.92 4024.52	0.14 -0.13
2009	919.64 948.77	3.66 3.17	174.83	23019.60	4024.52	-0.13 5.66
2010	974.98	2.76	181.46	24900.55	4518.57	6.26
2012	1002.70	2.84	185.22	26007.70	4817.16	6.61
2013	1029.19	2.64	188.96	27115.29	5123.69	6.36
2014	1054.47	2.46	192.71	28324.81	5458.59	6.54
2015	1078.86	2.31	195.84	29480.08	5773.36	5.77
2016	1102.10	2.15	198.43	30551.37	6062.26	5.00
2017 2018	1123.88 1144.61	1.98 1.84	200.86 203.27	31643.10 32749.75	6355.75 6656.97	4.84 4.74
2018	1165.77	1.85	205.67	33899.24	6971.93	4.74
2020	1187.71	1.88	208.08	35114.33	7306.46	4.80
2021	1210.02	1.88	210.47	36372.43	7655.47	4.78
2022	1232.40	1.85	212.83	37652.35	8013.74	4.68
2023	1254.99	1.83	215.17	38967.61	8384.48	4.63
2024	1278.14	1.84	217.45	40312.04	8765.79	4.55
2025 2026	1301.47	1.83 1.81	219.70	41686.50 43084.70	9158.64 9561.39	4.48 4.40
2026	1324.99 1349.55	1.85	221.92 224.13	44555.86	9986.16	4.40
2028	1374.47	1.85	226.28	46032.88	10416.13	4.31
2029	1399.36	1.81	228.41	47555.45	10862.07	4.28
2030	1424.47	1.79	230.51	49114.05	11321.40	4.23
2031	1450.01	1.79	232.58	50717.94	11796.21	4.19
2032	1475.74	1.77	234.62	52358.18	12284.28	4.14
2033 2034	1500.93 1526.26	1.71 1.69	236.63 238.58	54022.02 55716.73	12783.02 13292.95	4.06 3.99
2034	1526.26	1.69	238.58	57503.53	13292.95	3.99 4.04
2035	1578.57	1.69	240.30	59333.94	14382.07	3.99
2037	1605.85	1.73	244.26	61243.65	14959.41	4.01
2038	1633.33	1.71	246.11	63189.82	15551.69	3.96
2039	1661.27	1.71	247.94	65158.02	16155.50	3.88
2040	1689.66	1.71	249.79	67192.19	16783.76	3.89
2041 2042	1718.53 1747.86	1.71 1.71	251.64 253.49	69282.69 71429.45	17434.00 18106.53	3.87 3.86
2042	1747.69	1.71	255.49	73634.11	18801.64	3.84
2043	1808.00	1.71	257.19	75898.08	19520.48	3.82
2045	1838.81	1.70	259.05	78222.47	20263.66	3.81
2046	1870.13	1.70	260.91	80608.56	21031.38	3.79
2047	1901.97	1.70	262.77	83058.25	21824.98	3.77
2048	1934.33	1.70	264.62	85570.87	22644.10	3.75
2049	1967.21	1.70	266.48	88150.60	23490.72	3.74
2050 2051	2000.64 2034.62	1.70 1.70	268.34 270.20	90796.49 93511.33	24364.42 25266.57	3.72 3.70
2051	2034.62	1.70	270.20	96296.52	26197.92	3.69
2053	2104.25	1.70	273.91	99151.35	27158.64	3.67
2054	2139.92	1.70	275.76	102080.49	28150.07	3.65
2055	2176.18	1.69	277.61	105082.67	29172.22	3.63
2056	2213.02	1.69	279.46	108160.97	30226.65	3.61
2057	2250.47	1.69	281.31	111317.04	31314.22	3.60
2058	2288.53	1.69	283.15	114549.89	32434.31	3.58
2059	2327.22	1.69	284.97	117880.06	33592.63	3.57

**Table 5: Significant Government Downsizing Scenario** 

	Significant Gov. Downsizing (Low Case 2)					
	Gov. Emp	loyment		ERS En	ployers	
Fiscal Years	Thousands	% of Total Employment	Employment Thousands	Average Salary	Total Payroll (Mill. USD)	% Change
1989	297.05	31.33	137.18	10261.16	1407.59	
1990	294.74	30.61	138.65	10789.61	1495.99	6.28
1991 1992	291.53	29.84 30.02	139.47	11536.78	1609.00	7.55
1992	293.26 292.46	29.28	151.19 154.24	11059.08 12202.00	1672.00 1882.00	3.92 12.56
1994	292.33	28.91	151.94	12288.15	1867.00	-0.80
1995	303.56	28.88	153.70	13578.49	2087.00	11.78
1996	307.53	28.14	157.64	14101.93	2223.00	6.52
1997	318.89	28.30	159.60	14805.76	2363.00	6.30
1998 1999	309.48 302.18	27.17 26.44	154.85 149.69	15279.70 17202.33	2366.00 2575.00	0.13 8.83
2000	286.13	24.88	152.56	16147.41	2463.40	-4.33
2001	282.73	24.71	155.68	16376.10	2549.50	3.50
2002	288.68	25.06	156.89	19289.78	3026.43	18.71
2003	297.72	25.06	158.83	21094.43	3350.49	10.71
2004 2005	303.41 307.83	25.16 24.86	164.13 175.50	21637.99 23512.08	3551.40 4126.46	6.00 16.19
2005	302.49	24.00	175.50	23374.32	4121.87	-0.11
2007	298.13	23.60	176.84	22756.74	4024.23	-2.37
2008	286.93	22.67	172.65	23180.02	4002.00	-0.55
2009	280.87	21.73	169.61	23155.86	3927.56	-1.86
2010 2011	276.53 271.28	20.80 19.86	169.61 170.01	23941.68 24823.14	4060.64 4220.24	3.39 3.93
2011	265.36	18.93	170.01	25820.18	4393.96	4.12
2013	258.44	17.99	170.00	26863.31	4566.84	3.93
2014	250.77	17.06	169.55	28100.23	4764.31	4.32
2015	241.16	16.12	168.23	29387.95	4943.91	3.77
2016 2017	230.41 219.19	15.19 14.25	166.15 163.64	30684.87 32055.94	5098.40 5245.49	3.12 2.88
2017	221.85	14.23	165.93	33498.07	5558.23	5.96
2019	224.71	14.24	168.29	34993.41	5888.99	5.95
2020	227.06	14.21	170.50	36559.03	6233.19	5.84
2021	229.07	14.16	172.59	38178.15	6589.14	5.71
2022 2023	230.87 232.56	14.11 14.05	174.60 176.56	39839.97 41549.71	6956.04 7335.88	5.57 5.46
2023	234.12	13.99	178.45	43288.30	7724.69	5.30
2025	235.67	13.94	180.32	45066.04	8126.12	5.20
2026	237.09	13.88	182.13	46885.45	8539.25	5.08
2027	238.46	13.82	183.92	48770.96	8969.74	5.04
2028 2029	239.73 240.88	13.76 13.70	185.64 187.32	50660.05 52611.73	9404.71 9855.44	4.85 4.79
2030	241.82	13.62	188.91	54610.70	10316.52	4.68
2031	242.52	13.54	190.40	56650.92	10786.13	4.55
2032	243.20	13.47	191.87	58725.66	11267.44	4.46
2033 2034	243.93 244.41	13.40 13.32	193.34 194.71	60858.34 63018.67	11766.43 12270.25	4.43 4.28
2034	245.00	13.26	194.71	65256.45	12796.94	4.29
2036	245.58	13.20	197.47	67525.38	13334.48	4.20
2037	246.01	13.13	198.78	69840.31	13882.66	4.11
2038	246.41	13.06	200.04	72193.56	14441.95	4.03
2039 2040	247.52 248.60	13.03 13.00	201.58 203.11	74611.63 77109.25	15040.05 15661.99	4.14 4.14
2040	240.60	12.97	203.11	79675.10	16305.22	4.14
2042	250.71	12.94	206.17	82309.15	16969.98	4.08
2043	251.74	12.91	207.70	85012.53	17656.71	4.05
2044	252.74	12.88	209.21	87787.29	18366.17	4.02
2045 2046	253.71 254.67	12.85 12.82	210.72 212.23	90633.44 93552.89	19098.55 19854.53	3.99 3.96
2040	255.60	12.79	213.73	96547.36	20634.75	3.93
2048	256.51	12.76	215.22	99615.12	21438.99	3.90
2049	257.39	12.73	216.70	102760.95	22268.65	3.87
2050	258.25	12.70	218.18	105983.16	23123.52	3.84
2051 2052	259.09 259.90	12.67 12.64	219.65 221.11	109284.90 112666.70	24004.54 24912.14	3.81 3.78
2052	260.69	12.64	222.57	116127.04	25846.06	3.75
2054	261.45	12.58	224.01	119671.21	26807.90	3.72
2055	262.18	12.55	225.45	123296.49	27797.13	3.69
2056	262.89	12.52	226.88	127006.20	28814.78	3.66
2057 2058	263.58 264.24	12.49 12.46	228.30 229.70	130802.01 134680.38	29861.49 30936.54	3.63 3.60
2059	264.87	12.40	231.10	138664.56	32045.47	3.58

Table 6: Constant ERS Employment as a Share of Government Employment Scenario

	Constant Share in Gov. Employment (Low Case 3)					
	Gov. ERS Employers					
	Employment	Employment	% of Gov.	Average	Total Payroll	0/ 0/
Fiscal Years 1989	Thousands 297.05	Thousands 137.18	Employment 46.18	Salary 10261.16	(Mill. USD) 1407.59	% Change
1909	297.05	137.16	47.04	10789.61	1407.59	6.28
1991	291.53	139.47	47.84	11536.78	1609.00	7.55
1992	293.26	151.19	51.55	11059.08	1672.00	3.92
1993	292.46	154.24	52.74	12202.00	1882.00	12.56
1994 1995	292.33 303.56	151.94 153.70	51.97 50.63	12288.15 13578.49	1867.00 2087.00	-0.80 11.78
1995	307.53	157.64	51.26	14101.93	2223.00	6.52
1997	318.89	159.60	50.05	14805.76	2363.00	6.30
1998	309.48	154.85	50.04	15279.70	2366.00	0.13
1999 2000	302.18 286.13	149.69 152.56	49.54 53.32	17202.33 16147.41	2575.00 2463.40	8.83 -4.33
2000	282.73	155.68	55.07	16376.10	2549.50	3.50
2002	288.68	156.89	54.35	19289.78	3026.43	18.71
2003	297.72	158.83	53.35	21094.43	3350.49	10.71
2004 2005	303.41 307.83	164.13 175.50	54.09 57.01	21637.99 23512.08	3551.40 4126.46	6.00
2005	307.63	175.30	58.30	23374.32	4120.46	16.19 -0.11
2007	298.13	176.84	59.32	22756.74	4024.23	-2.37
2008	297.28	173.30	58.30	23180.02	4017.20	-0.17
2009	299.42	174.55	58.30	23155.86	4041.94	0.62
2010 2011	305.48 311.27	178.08 181.46	58.30 58.30	23941.68 24823.14	4263.61 4504.33	5.48 5.65
2012	317.25	184.95	58.30	25820.18	4775.39	6.02
2013	322.93	188.26	58.30	26863.31	5057.19	5.90
2014	328.43	191.46	58.30	28100.23	5380.08	6.38
2015 2016	332.12 334.86	193.62 195.21	58.30 58.30	29387.95 30684.87	5689.97 5989.98	5.76 5.27
2017	337.51	196.76	58.30	32055.94	6307.25	5.30
2018	340.10	198.27	58.30	33498.07	6641.52	5.30
2019	342.65	199.75	58.30	34993.41	6989.98	5.25
2020 2021	345.14 347.58	201.20 202.63	58.30 58.30	36559.03 38178.15	7355.77 7735.88	5.23 5.17
2021	349.91	203.99	58.30	39839.97	8126.84	5.05
2023	352.20	205.32	58.30	41549.71	8530.99	4.97
2024	354.42	206.61	58.30	43288.30	8943.97	4.84
2025 2026	356.63 358.73	207.90 209.13	58.30 58.30	45066.04 46885.45	9369.32 9805.08	4.76 4.65
2020	360.85	210.36	58.30	48770.96	10259.47	4.63
2028	362.84	211.52	58.30	50660.05	10715.86	4.45
2029	364.81	212.67	58.30	52611.73	11189.08	4.42
2030 2031	366.73 368.60	213.79 214.88	58.30 58.30	54610.70 56650.92	11675.35 12173.07	4.35 4.26
2031	370.38	215.92	58.30	58725.66	12680.04	4.16
2033	372.09	216.92	58.30	60858.34	13201.17	4.11
2034	373.71	217.86	58.30	63018.67	13729.05	4.00
2035 2036	375.26 376.76	218.76 219.64	58.30 58.30	65256.45 67525.38	14275.75 14831.08	3.98 3.89
2030	378.25	220.50	58.30	69840.31	15400.13	3.84
2038	379.75	221.38	58.30	72193.56	15982.12	3.78
2039	381.23	222.25	58.30	74611.63	16582.17	3.75
2040 2041	382.71 384.19	223.11 223.97	58.30 58.30	77109.25 79675.10	17203.74 17844.89	3.75 3.73
2041	385.67	224.83	58.30	82309.15	18505.80	3.73
2043	387.13	225.68	58.30	85012.53	19185.95	3.68
2044	388.59	226.53	58.30	87787.29	19886.87	3.65
2045 2046	390.05 391.49	227.39 228.23	58.30 58.30	90633.44 93552.89	20608.75 21351.15	3.63 3.60
2047	392.93	229.07	58.30	96547.36	22115.64	3.58
2048	394.35	229.89	58.30	99615.12	22900.89	3.55
2049	395.77	230.72	58.30	102760.95	23709.24	3.53
2050 2051	397.18 398.57	231.54 232.35	58.30 58.30	105983.16 109284.90	24539.30 25392.50	3.50 3.48
2051	399.95	232.35	58.30	112666.70	26269.09	3.45
2053	401.32	233.96	58.30	116127.04	27168.86	3.43
2054	402.68	234.75	58.30	119671.21	28092.51	3.40
2055 2056	404.01 405.34	235.53 236.30	58.30 58.30	123296.49 127006.20	29039.48 30011.33	3.37 3.35
2056	405.34	237.07	58.30	130802.01	31008.60	3.32
2058	407.94	237.82	58.30	134680.38	32029.06	3.29
2059	409.19	238.54	58.30	138664.56	33077.33	3.27

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	YEES RETIREM OF THE COMMO			NMENT	
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Adopted on January 24, 2008

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### BOND RESOLUTION

WHEREAS, Employees Retirement System of the Government of the Commonwealth of Puerto Rico (the "System") is a trust created pursuant to Act 447 of May 15, 1951, as amended (the "Act"), to provide pension and other benefits to retired employees of the central government, municipalities and public corporations of the Commonwealth of Puerto Rico;

WHEREAS, by virtue of the Act, the System has, among others, the duties and powers

- (i) to incur debt secured by the assets of the System;
- (ii) to receive and collect Employers' Contributions;
- (iii) to make contracts and to execute all instruments necessary or convenient for the exercise of any of its powers; and
- (iv) to sue and be sued, complain and defend in all courts of justice and administrative bodies;

**WHEREAS,** as of June 30, 2005, the System had an unfunded liability of approximately \$9.9 billion pursuant to the System's actuarial evaluation report;

WHEREAS, the System's statutory right to receive Employers' Contributions is an obligation of the Employers and a legal asset of the System;

WHEREAS, as a legal asset of the System, the Employers' Contributions may be pledged to secure the debt of the System; and

WHEREAS, in order to decrease the unfunded liability of the System, the System wishes to issue limited, non-recourse obligations in the form of Bonds, payable solely from the Pledged Property (as defined below), which includes the Employers' Contributions; now, therefore,

 $\ensuremath{\mathbf{BE}}$  IT  $\ensuremath{\mathbf{RESOLVED}}$  by the Board of Trustees of the System, as follows:

### ARTICLE I STATUTORY AUTHORITY

SECTION 101. Authority for this Resolution. This Resolution is adopted pursuant to the provisions of the Act.

SECTION 102 Resolution Constitute Contract. In consideration of the purchase and acceptance of any and all of the Bonds authorized to be issued hereunder by those Persons who shall hold the same from time to time, this Resolution shall be deemed to be and shall constitute a contract among the System, the Owners from time to time of the Bonds and the Ancillary Facility Providers; and the security interest created in this Resolution and the covenants and agreements therein set forth to be performed on behalf of the System shall be for the equal benefit, protection and security of the Owners of any and all of the Bonds and the Ancillary Facility Providers, all of which shall be of equal rank without preference, priority or distinction of any of the Bonds and Ancillary Facility Providers over any other thereof. except as expressly provided in or permitted by this Resolution.

### ARTICLE II AUTHORIZATION AND ISSUANCE OF BONDS

SECTION 201. Authorization of Bonds. The System may issue hereunder one or more series of Bonds of the System to be designated as "Pension Funding Bonds," which Bonds may be issued as hereinafter provided without limitation as to amount except as is or may hereafter be provided in this Resolution or in a Supplemental Resolution or as may be limited

by law. There is hereby further created by this Resolution, in the manner and to the extent provided herein, a security interest and lien on the Pledged Property to secure the full and timely payment of the principal of and premium, if any, and interest on, all of the Bonds issued pursuant to this Resolution or any Supplemental Resolution. The Bonds shall be special obligations of the System payable solely from the Pledged Property without recourse against other assets of the System. The Commonwealth shall not be liable for the Bonds or any Ancillary Bond Facility. Neither any Bond nor any Ancillary Bond Facility shall constitute a debt of the Commonwealth within the meaning of any constitutional provision, or a pledge of the good faith and credit of the Commonwealth or of the taxing power of the Commonwealth, and the Commonwealth shall not be liable to make any payments thereon, nor shall any Bond or any Ancillary Bond Facility be payable out of any funds or assets other than the Pledged Property, and the Bonds and each Ancillary Bond Facility shall contain a statement to the foregoing effect.

SECTION 202. General Provisions for Issuance of Bonds.

- The Bonds may, if and when authorized by the System pursuant to one or more Supplemental Resolutions, be issued in one or more Series, as Senior Bonds or Subordinated Bonds, and the designation thereof, in addition to the name "Pension Funding Bonds," shall include such further appropriate particular designations added to or incorporated in such title for the Bonds of any particular Series as the System may determine, including designations of Classes. Each Bond shall bear upon its face the designation so determined for the Series to which it belongs. Except as may be limited by applicable law, Bonds of a Series may be issued in the form of Capital Appreciation Bonds, Convertible Capital Appreciation Bonds, Current Interest Bonds, Adjustable Rate Bonds, Option Bonds, Fixed Tender Bonds, or any combination of the foregoing, or any other type of Bond that may legally be issued by the System, which in each case may include Serial Bonds or Term Bonds, or any combination thereof.
- 2. Each Supplemental Resolution authorizing or providing for the issuance of a Series of Bonds shall also specify, except as may be limited by applicable law:
  - (i) the authorized principal amount and designation of such Series of Bonds;
  - the purpose (ii) purposes for which such Series of Bonds are being issued, which shall be one or more of the following, to the extent then permitted by applicable law and the provisions of this Resolution: (a) to provide sufficient funds in order to fund the System and decrease the unfunded liability of the System; (b) to refund or otherwise prepay any Bonds or other evidences of indebtedness issued by the System; (c) to pay or provide for the payment of Financing Costs, including but not limited to the costs of issuance; (d) to fund debt service reserves and other reserve accounts; and/or (e) for such other purposes as may be authorized by the Act, as the same may be amended and then in effect.
  - (iii) the date or dates, maturity date or dates and amounts of each maturity of the Bonds of such Series;
  - (iv) the interest rate or rates of the Bonds of such Series (which may include variable, convertible or other rates, and zero interest rate bonds), or the manner of determining such interest

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rate or rates, and the interest payment dates of the Bonds of such Series, and the date or dates on which and the methods by which any such rates shall be adjusted;

- (v) the type of Bonds to be issued, including, but not limited to, Capital Appreciation Bonds, Convertible Capital Appreciation Bonds, Current Interest Bonds, Adjustable Rate Bonds, Option Bonds, or Fixed Tender Bonds;
- (vi) the designation of Bonds of such Series as Senior Bonds or as Subordinated Bonds;
- (vii) the Record Date, if any, which shall be the 15<sup>th</sup> day of the month preceding the date of payment, whether or not a Business Day, if no other Record Date is specified;
- (viii) the denomination or denominations of, and the manner of dating, numbering and lettering, the Bonds of such Series;
- (ix) if so determined by the System, any Debt Service Reserve Requirement for the Bonds of such Series, and the method of calculating the same and funding thereof (which may be from Bond proceeds);
- (x) the place or places of payment of the principal of and premium, if any, and interest on the Bonds of such Series, or the method of determining the same;
- (xi) the Redemption Price or Prices, and the Currency in which such Prices are payable, if any, and, subject to the provisions of Article IV, the redemption terms, if any, for the Bonds of such Series (including but not limited to any notice of redemption period other than as provided in Section 406), provided that Bonds of any maturity for which Sinking Fund Installments shall be established pursuant to paragraph (xii) of this paragraph shall in any event be redeemable, or payable at maturity, by application of the Sinking Fund Installments for such Bonds on the due dates of such Sinking Fund Installments;
- (xii) the amount of each Sinking Fund Installment, or the method for determining such amount, and due date of each Sinking Fund Installment, if any, for Bonds of like maturity of such Series;
- (xiii) the amount, if any, or the method for determining such amount, to be credited to the Capitalized Interest Account, for capitalized interest with respect to such Series of Bonds and provisions for the application thereof to the payment of all or a portion of the interest on such Series of Bonds or any other Series of Bonds;
- (xiv) the amount, if any, or method of determining the costs of issuance to be delivered to GDB at Closing;
- (xv) if so determined by the System, provisions for the application of any moneys available therefor to the purchase or

- redemption of Bonds of such Series and for the order of purchase or redemption of such Bonds;
- (xvi) if so determined by the System, provisions for the sale of the Bonds of such Series:
- (xvii) provisions for the execution and authentication of the Bonds of such Series;
- (xviii) the respective forms of the Bonds of such Series and of the Fiscal Agent's certificate of authentication;
- (xix) if Bonds of such Series are Adjustable Rate Bonds that are not the subject of a Qualified Hedge, the Maximum Interest Rate for such Bonds;
- (xx) if Bonds of such Series are Option Bonds or Fixed Tender Bonds, provisions regarding tender for purchase or redemption thereof and payment of the purchase or Redemption Price thereof, in the Currency in which the Bonds of such Series are payable;
- (xxi) if Bonds of such Series are Capital Appreciation Bonds or Convertible Capital Appreciation Bonds, provisions for including the principal and interest portions of the Accreted Amount in the calculation of accrued and unpaid and accruing interest or Principal Installments for purposes of the definition of Accrued Payment Obligation;
- (xxii) if Bonds of such Series are Adjustable Rate Bonds, Capital Appreciation Bonds, Convertible Capital Appreciation Bonds or Bonds hedged or to be hedged by a Qualified Hedge, or the Supplemental Resolution authorizes a Qualified Hedge on Bonds previously issued, provisions specifying the method of calculating the Accrued Payment Obligation with respect to such Adjustable Rate Bonds, Capital Appreciation Bonds or the Bonds hedged or to be hedged by such Qualified Hedge, as the case may be, for purposes of the Debt Service Reserve Requirement and the additional Bonds tests of Sections 204 and 708;
- (xxiii) if so determined by the System, modifications to the definition of Revenues or Pledged Property applicable to the Bonds of such Series for the only purpose of adding resources to Revenues or Pledged Property for the benefit of the Bondowners:
- (xxiv) deposits into Funds, Accounts and Subaccounts as may be required or permitted by this Resolution and not otherwise provided for above;
- (xxv) if such Bonds are not payable in Dollars, the Foreign Currency or Currencies or Currency Unit in which the Bonds of such Series shall be denominated or in which payment of the principal of (and/or premium, if any) and/or interest on the Bonds of such Series may be made;
- (xxvi) if the amount of principal of (and premium, if any) or interest on the

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Bonds of such Series may be determined with reference to an index, including, but not limited to, an index based on a Currency or Currencies other than that in which the Bonds of such Series are denominated or payable, or any other type of index, the manner in which such amounts shall be determined;

(xxvii) the book-entry-only systems of registration to be chosen with respect to the Bonds of such Series, and the procedures regarding such registration and, if applicable, the rules and regulations of the book-entry-only system depository; and

(xxvii) any other provisions deemed advisable by the System, not in conflict with the provisions of this Resolution or the Act as each is then in effect.

3. Except in the case of the Series A Bonds being issued pursuant to the First Supplemental Resolution, each Series of Bonds issued by the System must satisfy the conditions contained in Section 708 in connection with the issuance of additional Bonds or in Section 204 in connection with the issuance of Refunding Bonds. Each Series of Bonds shall be executed by the System for issuance under this Resolution and delivered to the Fiscal Agent and thereupon shall be authenticated by the Fiscal Agent and delivered to the System and upon the receipt by the Fiscal Agent of:

(i) a copy of this Resolution, certified by an Authorized Officer of the System;

Opinion (ii) an Counsel to the effect that (A) the System has the right and power under the Act, as amended to the date of such opinion, to adopt the Resolution and the Resolution has been duly and lawfully adopted by the System, is in full force and effect and is valid and binding upon the System and enforceable in accordance with its terms, and no other authorization for the Resolution is required; (B) the Resolution creates the valid security interest for the benefit of the Owners of the Bonds on the Pledged Property, subject only to the provisions of the Resolution permitting the application thereof to the purposes and on the terms and conditions set forth in the Resolution; and (C) the Bonds of such Series are valid and binding special, non-recourse obligations of the System as provided in the Resolution, enforceable in accordance with their terms and the terms of the Resolution (except insofar as the enforceability thereof may be limited by bankruptcy, moratorium, insolvency or other laws affecting creditors' rights or remedies theretofore or thereafter enacted and may be subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law), or other customary exception), and entitled to the benefit of the Resolution and of the Act, as amended to the date of such opinion, and such Bonds have been duly and validly authorized, executed and issued in accordance with law, including the Act, as amended to the date of such opinion, and in accordance with the Resolution;

(iii) a written order as to the authentication and delivery of the Bonds of such Series, signed by an Authorized Officer of the System;

(iv) a copy of the Supplemental Resolution authorizing such Series,

certified by an Authorized Officer of the System;

(v) a certificate of an Authorized Officer of the System stating that (A) the System is not in default in any material respect in the performance of any of the terms, provisions or covenants of this Resolution or any Supplemental Resolution to be complied with or performed by the System, and (B) the System has not violated the provisions of Article VII of this Resolution; and

(vi) such further documents as are required by the provisions of this Section or Article IX or any Supplemental Resolution adopted pursuant to Article IX.

SECTION 203. Special Provisions Concerning Capital Appreciation Bonds and Convertible Capital Appreciation Bonds.

Except as otherwise may be provided in a Supplemental Resolution:

1. For purposes of clause (ii) within the definition of "Outstanding" in this Resolution, the principal amount of any Capital Appreciation Bond or Convertible Capital Appreciation Bond, in reference to the payment thereof at maturity, shall be deemed to equal its Maturity Amount.

2. For purposes of the definition of "Redemption Price" in this Resolution, the principal amount of any Capital Appreciation Bond or Convertible Capital Appreciation Bond shall be deemed to equal its Accreted Amount as of the date of the intended redemption.

3. For purposes of Sections 305, 307 and 308, the principal amount of any Capital Appreciation Bond or Convertible Capital Appreciation Bond shall be deemed to equal its Accreted Amount as of the date of the intended exchange or substitution.

4. For purposes of Section 406, the principal amount of any Capital Appreciation Bond or Convertible Capital Appreciation Bond shall be deemed to equal its Accreted Amount.

Sections 501, 502, and 1103, and of all other provisions of this Resolution relating to security for the Bonds or application of assets which secure the Bonds, the principal amount of each Capital Appreciation Bond or Convertible Capital Appreciation Bond shall be deemed to equal its Accreted Amount as of the date of the intended application of the subject assets.

6. For purposes of Sections 1002, 1003, 1101, 1102, 1105 and 1106 and of all other provisions of this Resolution relating to consents or directions given by, or requests of, Owners of the Bonds, the principal amount of each Capital Appreciation Bond or Convertible Capital Appreciation Bond shall be deemed to equal its Accreted Amount as of the most recent Accretion Date.

7. For purposes of Section 1301, the principal amount of any Capital Appreciation Bond or Convertible Capital Appreciation Bond payable upon the maturity thereof shall be deemed to equal its Maturity Amount.

SECTION 204. Special Provisions for Refunding

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Bonds.

- 1. Bonds of one or more Series may be authenticated and delivered upon original issuance, subject to the provisions and limitations of Section 202 and this Section, as Refunding Bonds, and only for the purposes of creating economic savings, restructuring debt service, modifying Resolution covenants, and providing for more favorable debt terms, or any of the foregoing or any other valid purpose of the System. Each Supplemental Resolution authorizing a Series of Refunding Bonds shall set forth that the purposes for which such Series is issued include the payment or redemption of all or any part of the Bonds of any one or more Series then Outstanding.
- 2. The Refunding Bonds of such Series shall be authenticated and delivered by the Fiscal Agent only upon receipt by the Fiscal Agent (in addition to the requirements of Section 202) of:
  - (i) irrevocable instructions to the Fiscal Agent, in form reasonably satisfactory to it, to give due notice of the payment or redemption of all the Bonds so to be refunded on a payment or redemption date specified in such instructions and the payment or redemption dates, if any, upon which such Bonds are to be paid or redeemed:
  - (ii) if the Bonds of a Series to be refunded are to be paid or redeemed subsequent to the forty-fifth day next succeeding the date of authentication of the Refunding Bonds, irrevocable instructions to the Fiscal Agent, to provide notice in the manner provided in Section 1301 with respect to the payment of such Bonds pursuant to such Section 1301;
  - (iii) either (A) moneys or (B) Defeasance Securities as shall be necessary to comply with the provisions of paragraph 3 of Section 1301, which moneys and Defeasance Securities shall be held in trust and used only as provided in paragraph 3 of Section 1301; and
  - (iv) a certificate of an independent certified public accountant certifying that (A) the amounts described in paragraph (iii) above are sufficient, without any reinvestment, to pay or redeem all of the Bonds to be refunded, and (B) the principal and interest payable with respect to the Refunding Bonds in each year while the Refunding Bonds are Outstanding is less than the principal and interest payable with the respect to the Bonds being refunded, provided that the certificate of the independent certified public accountant shall not be required to cover the matters described in this clause (B) if the Refunding Bonds are issued in compliance with the additional Bonds test set forth in Section 708.
- 3. Refunding Bonds may be issued upon compliance with Section 708 in lieu of compliance with this Section.
- SECTION 205. Delegation of Officers and Committees. A Supplemental Resolution authorizing Bonds may delegate to any Authorized Officer of the System the power to issue Bonds from time to time in compliance with the provisions of this Resolution and to fix the details of any such Bonds by a certificate of such Authorized Officer. Any such action by an Authorized Officer of the System shall be in writing. Each such action by an Authorized Officer of the System with respect to any

Bonds shall be deemed to be part of the Supplemental Resolution providing for such Bonds.

SECTION 206. Credit and Liquidity Facilities; Rights of Credit Facility Providers.

- 1. In connection with any Bonds, the System may obtain or cause to be obtained one or more Credit Facilities or Liquidity Facilities and agree with the Credit Facility Provider or Liquidity Facility Provider to reimburse such provider directly for amounts paid under the terms of such Credit Facility or Liquidity Facility, together with interest thereon; *provided*, *however*, that no obligation to reimburse a Credit Facility Provider or Liquidity Facility Provider shall be created, for purposes of this Resolution, until amounts are paid under such Credit Facility or Liquidity Facility.
- Any Supplemental Resolution may provide that (i) so long as a Credit Facility is in full force and effect, and payment on the Credit Facility is not in default, the Credit Facility Provider shall be deemed to be the sole Owner of the Outstanding Bonds the payment of which such Credit Facility secures when the approval, consent or action of the Owners of such Bonds is required or may be exercised under this Resolution, or, in the alternative, that the approval, consent or action of the Credit Facility Provider shall be required in addition to the approval, consent or action of the applicable percentage of the Owners of Outstanding Bonds required by Section 1002 and following an Event of Default, provided that no such approval, consent or action of a Credit Facility Provider may be made or taken without the approval, consent or action of the Owner of each Bond affected if such approval, consent or action of such Owner otherwise would be required by the second sentence of Section 1002, and (ii) in the event that the principal, Sinking Fund Installments, if any, and Redemption Price, if applicable, and interest due on any Outstanding Bonds shall be paid in the Currency in which the Bonds of such Series are payable under the provisions of a Credit Facility, all covenants, agreements and other obligations of the System to the Owners of such Bonds shall continue to exist and such Bonds shall be deemed to remain Outstanding, and such Credit Facility Provider shall be subrogated to the rights of such Owners in accordance with the terms of such Credit Facility.

SECTION 207. Qualified Hedges. The System may enter into one or more Qualified Hedges in connection with any Bonds (i) at the time of issuance of such Bonds, (ii) prior to the issuance of such Bonds, in anticipation of the issuance thereof, provided that payments by the System under the Qualified Hedges do not commence until the date any Bonds to which such Qualified Hedge of Qualified Hedges relate are expected to be issued, or (iii) after the issuance of such Bonds.

SECTION 208. Parity Obligations and Subordinate Obligations. For purposes of Articles V and XI, all Parity Obligations and Subordinate Obligations shall specify, to the extent applicable, the interest and principal components of such Parity Obligations and Subordinate Obligations; provided, however, that in the case of Qualified Hedges, scheduled payments thereunder shall constitute the interest components thereof and there shall be no principal components.

### ARTICLE III GENERAL TERMS AND PROVISIONS OF BONDS

SECTION 301. Medium of Payment; Form and Date.

1. The Bonds shall be payable, with respect to interest, principal and premium, if any, in Dollars or any Currency which at the time of payment is legal tender for the payment of public and private debts, as provided in the

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Supplemental Resolution authorizing the issuance thereof.

- 2. The Bonds of each Series shall be issued only in the form of fully registered Bonds without coupons unless otherwise authorized by the Supplemental Resolution authorizing the issuance thereof.
- 3. Each Bond shall be lettered and numbered as provided in the Supplemental Resolution authorizing the issuance thereof and so as to be distinguished from every other Bond
- 4. Bonds of each Series shall be dated as provided in the Supplemental Resolution authorizing the issuance thereof.
- 5. If so provided by the Supplemental Resolution authorizing the issuance thereof, the Bonds of a Series authorized to be issued by such Supplemental Resolution may be issued in book entry form without definitive Bonds delivered to each beneficial owner thereof.

SECTION 302. Legends. The Bonds of each Series may contain or have endorsed thereon such provisions, specifications and descriptive words not inconsistent with the provisions of this Resolution as may be necessary or desirable to comply with custom or otherwise, as may be determined by the System prior to the authentication and delivery thereof.

SECTION 303. Execution and Authentication.

- The Bonds shall be executed in the name of the System by the manual or facsimile signature of an Authorized Officer of the System and its seal (or a facsimile thereof) shall be thereunto affixed, imprinted, engraved or otherwise reproduced, and attested by the manual or facsimile signature of its Secretary or an Assistant Secretary. In case any one or more of the officers who shall have signed or sealed any of the Bonds shall cease to be such officer before the Bonds so signed and sealed shall have been authenticated and delivered by the Fiscal Agent, such Bonds may, nevertheless, be authenticated and delivered as herein provided, and may be issued as if the persons who signed or sealed such Bonds had not ceased to hold such offices. Any Bond of a Series may be signed and sealed on behalf of the System by such persons as at the time of the execution of such Bond shall be duly authorized or hold the proper office in the System, although at the date borne by the Bonds of such Series such persons may not have been so authorized or have held such office.
- 2. The Bonds of each Series shall bear thereon a certificate of authentication, in the form set forth in the Supplemental Resolution authorizing such Bonds, executed manually by the Fiscal Agent. Only such Bonds as shall bear thereon such certificate of authentication shall be entitled to any right or benefit under this Resolution and no Bond shall be valid or obligatory for any purpose until such certificate of authentication shall have been duly executed by the Fiscal Agent. Such certificate of the Fiscal Agent upon any Bond executed on behalf of the System shall be conclusive evidence that the Bond so authenticated has been duly authenticated and delivered under this Resolution and that the Owner thereof is entitled to the benefits of this Resolution.

SECTION 304. Negotiability, Transfer and Registry. All Bonds issued under this Resolution shall be negotiable, subject to the provisions for registration and registration of transfer contained in this Resolution and in the Bonds. So long as any of the Bonds shall remain outstanding, the Fiscal Agent shall maintain and keep, at the Corporate Trust

Office, books for the registration and registration of transfer of Bonds; and, upon presentation thereof for such purpose at said office, the Fiscal Agent shall register or cause to be registered therein, under such reasonable regulations as it or the Fiscal Agent may prescribe, any Bond entitled to registration or registration of transfer. So long as any of the Bonds remain Outstanding, the Fiscal Agent shall also make all necessary provision to permit the exchange of Bonds at the Corporate Trust Office.

 $\begin{tabular}{lll} SECTION 305. & Registration & of & Transfer & of \\ Bonds. & \end{tabular}$ 

- 1. The transfer of each Bond shall be registrable only upon the books of the System, which shall be kept for that purpose at the Corporate Trust Office, by the Owner thereof in person or by his attorney duly authorized in writing, upon surrender thereof together with a written instrument of transfer duly executed by the Owner or his duly authorized attorney. Upon the registration of transfer of any such Bond, the System shall issue, and the Fiscal Agent shall authoriticate, in the name of the transferee a new Bond or Bonds of the same aggregate principal amount, Series, maturity, and interest rate, as the surrendered Bond.
- The System and the Fiscal Agent may deem and treat the person in whose name any Bond shall be registered upon the books of the System as the absolute owner of such Bond whether such Bond shall be overdue or not, for the purpose of receiving payment of, or on account of, the principal or Redemption Price, if any, of and interest on such Bond and for all other purposes, and all such payments so made to any such Owner or upon his duly authorized written order shall be valid and effectual to satisfy and discharge the liability upon such Bond to the extent of the sum or sums so paid, and neither the System nor the Fiscal Agent shall be affected by any notice to the contrary. The System agrees to indemnify and save the Fiscal Agent harmless from and against any and all loss, cost, charge, expense, judgment or liability incurred by it, acting in good faith and without gross negligence under this Resolution, in so treating such Owner.

SECTION 306. Regulations with Respect to Exchanges and Registration of Transfers. In all cases in which the privilege of exchanging Bonds or registering transfers of Bonds is exercised, the System shall execute and the Fiscal Agent shall authenticate and deliver Bonds in accordance with the provisions of this Resolution. All Bonds surrendered in any such exchanges or registration of transfers shall forthwith be canceled by the Fiscal Agent. For every such exchange or registration of transfer of Bonds, whether temporary or definitive, the System or the Fiscal Agent may make a charge sufficient to reimburse it for any tax, fee or other governmental charge required to be paid with respect to such exchange or registration of transfer, and, except (i) with respect to the delivery of definitive Bonds in exchange for temporary Bonds, (ii) in the case of a Bond issued upon the first exchange or registration of transfer of a Bond or Bonds surrendered for such purpose within 60 days after the first authentication and delivery of any of the Bonds of the same Series, or (iii) as otherwise provided in this Resolution, may charge a sum sufficient to pay the cost of preparing each new Bond issued upon such exchange or registration of transfer, which sum or sums shall be paid by the person requesting such exchange or registration of transfer as a condition precedent to the exercise of the privilege of making such exchange or registration of transfer. Neither the System nor the Fiscal Agent shall be required to register the transfer of or exchange any Bonds called for redemption.

SECTION 307. Bonds Mutilated, Destroyed, Stolen or Lost. In case any Bond shall become mutilated or be destroyed, stolen or lost, the System shall execute, and thereupon the Fiscal Agent shall authenticate and deliver, a new Bond of like Series, maturity, and principal amount as the Bond so mutilated,

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destroyed, stolen or lost or in exchange and substitution for such mutilated Bond, upon surrender and cancellation of such mutilated Bond or in lieu of and substitution for the Bond destroyed, stolen or lost, upon filing with the Fiscal Agent evidence satisfactory to the System and the Fiscal Agent that such Bond has been destroyed, stolen or lost and upon furnishing the System and the Fiscal Agent with indemnity satisfactory to it and complying with such other reasonable regulations as the System and the Fiscal Agent may prescribe and paying such expenses as the System and Fiscal Agent may incur. All Bonds so surrendered to the Fiscal Agent shall be canceled by it. Any such new Bonds issued pursuant to this Section in substitution for Bonds alleged to be destroyed, stolen or lost shall constitute original additional contractual obligations on the part of the System, whether or not the Bonds so alleged to be destroyed, stolen or lost be at any time enforceable by anyone, and shall be equally secured by and entitled to equal and proportionate benefits with all other Bonds issued under this Resolution, in any moneys or securities held by the System or the Fiscal Agent for the benefit of the Bondowners.

SECTION 308. Preparation of Definitive Bonds; Temporary Bonds.

- Until the definitive Bonds of any Series are prepared, the System may execute, in the same manner as is provided in Section 303, and, upon the request of the System, the Fiscal Agent shall authenticate and deliver, in lieu of definitive Bonds, one or more temporary Bonds substantially of the tenor of the definitive Bonds in lieu of which such temporary Bond or Bonds are issued, in denominations or any multiples thereof authorized by the System, and with such omissions, insertions and variations as an Authorized Officer of the System may deem appropriate to temporary Bonds. The System at its own expense shall prepare and execute and, upon the surrender of such temporary Bonds for exchange and the cancellation of such surrendered temporary Bonds, the Fiscal Agent shall authenticate and, without charge to the Owner thereof, deliver in exchange therefor definitive Bonds, of the same aggregate principal amount, Series and maturity if any, as the temporary Bonds surrendered. Until so exchanged, the temporary Bonds shall in all respects be entitled to the same benefits and security as definitive Bonds authenticated and issued pursuant to this Resolution.
- 2. All temporary Bonds surrendered in exchange either for another temporary Bond or Bonds or for a definitive Bond or Bonds shall be forthwith canceled by the Fiscal Agent.

SECTION 309. Tender of Option Bonds or Fixed Tender Bonds. Option Bonds or Fixed Tender Bonds which are required to be delivered for redemption or purchase pursuant to the provisions hereof or of the Supplemental Resolution authorizing such Bonds shall be deemed surrendered for transfer even though such Bonds have not been actually delivered by the Owners thereof.

SECTION 310. Book-Entry-Only System. Notwithstanding any other provision of this Resolution, the System may employ one or more book-entry-only systems of registration with respect to any Bonds, and the procedures regarding such registration shall be set forth in a Supplemental Resolution and, if applicable, the rules and regulations of the book-entry-only system depository. Any provisions of this Resolution inconsistent with book-entry-only Bonds, including but not limited to the manner in which Bonds may be paid, shall not be applicable to such book-entry-only Bonds.

### ARTICLE IV REDEMPTION OF BONDS

SECTION 401. Privilege of Redemption and

Redemption Price. Series of Bonds subject to redemption prior to maturity pursuant to the Supplemental Resolution authorizing such Series shall be redeemable, upon notice as provided in this Article IV, at such times, at such Redemption Prices, in such Currencies and upon such terms, in addition to and consistent with the terms contained in this Article IV, as may be specified in such Supplemental Resolution.

SECTION 402. Redemption at the Election of the System. In the case of any redemption of Bonds otherwise than as provided in Section 403, the System shall give written notice to the Fiscal Agent of its election so to redeem, of the redemption date, of the "CUSIP," "ISIN" or other similar numbers (provided, however, that the System and the Fiscal Agent shall not be liable for the correctness of such numbers as contained in such notice), of the Series, and of the aggregate principal amount (or Maturity Amount, if applicable) of the Bonds of each maturity and interest rate of such Series to be redeemed, which principal amount (or Maturity Amount, if applicable) shall be determined by the System in its sole discretion, subject to any limitations with respect thereto contained in any Supplemental Resolution. Such notice shall be given at least forty (40) days prior to the redemption date or such shorter period as shall be acceptable to the Fiscal Agent. In the event notice of redemption shall have been given as provided in Section 406, except to the extent such notice shall state that such redemption is conditioned upon the receipt by the Fiscal Agent of moneys sufficient to pay the Redemption Price, in the Currency in which the Bonds of such Series are payable, or upon the satisfaction of any other condition or the occurrence of any other event as shall be stated in such notice, the System shall, prior to the redemption date, pay or cause to be paid to the Fiscal Agent an amount in cash and/or a principal amount of Investment Obligations maturing or redeemable at the option of the holder thereof not later than the date fixed for redemption which, in addition to other moneys, if any, available therefor held by the Fiscal Agent, will be sufficient to redeem on the redemption date at the Redemption Price thereof, plus interest accrued and unpaid to the redemption date, and in the Currency in which the Bonds of such Series are payable, all of the Bonds (or portions thereof) to be

SECTION 403. Redemption in Satisfaction of Sinking Fund Installments.

- 1. In addition to the redemption of Bonds pursuant to Sections 401 and 402 above, Term Bonds issued pursuant to this Resolution shall be subject to mandatory redemption by lot out of Sinking Fund Installments at a Redemption Price equal to the principal amount (or Accreted Amount, if applicable) thereof, in the Currency in which the Bonds of such Series are payable, on the dates and in the amounts set forth in the Supplemental Resolution pursuant to which such Bonds were issued.
- 2. In the case of any redemption of Bonds out of Sinking Fund Installments, the System shall, in the case of each Sinking Fund Installment, give written notice to the Fiscal Agent of (i) the date of such Sinking Fund Installment, (ii) the unsatisfied balance of such Sinking Fund Installment (determined as provided in Section 507) and (iii) the particular Series and maturity of the Bonds then being redeemed out of such Sinking Fund Installment. Such notice shall be given at least forty (40) days prior to the date of such redemption, or such shorter period as shall be acceptable to the Fiscal Agent.
- 3. The System shall, and hereby covenants that it will, on or prior to 11:00 a.m. (New York City time) on the date of such redemption, pay to the Fiscal Agent an amount in cash which, in addition to other moneys, if any, available therefor held by the Fiscal Agent, will be sufficient to redeem at such redemption date, at the Redemption Price thereof, plus interest accrued and unpaid to the redemption date, in the

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Currency in which the Bonds of such Series are payable, all of the Bonds which are to be redeemed out of such Sinking Fund Installment.

SECTION 404. Selection of Bonds to be Redeemed in Partial Redemption.

- 1. In the event of redemption of less than all the Outstanding Bonds of a particular Series pursuant to Section 401 or 402 hereof, the System shall designate the maturities of the Bonds to be redeemed.
- 2. If less than all of the Outstanding Bonds of a particular Series and maturity are to be redeemed, the Fiscal Agent shall select the Bonds or portions of Bonds to be redeemed in the appropriate authorized denominations by lot or by such other manner as it deems appropriate. For purposes of this Section 404, Bonds (or portions thereof) which have theretofore been selected by lot for redemption shall not be deemed to be Outstanding.

SECTION 405. Notice of Redemption.

When the Fiscal Agent shall receive notice from the System of its election to redeem Bonds pursuant to Section 402, or when Bonds are to be redeemed pursuant to Section 403, the Fiscal Agent shall give notice, in the name of the System, of the redemption of such Bonds, which notice shall specify the Series and maturities and interest rate of the Bonds to be redeemed, the redemption date and the place or places where amounts due upon such redemption will be payable and, if less than all of the Bonds of any like Series and maturity and interest rate are to be redeemed, the letters and numbers or other distinguishing marks of such Bonds so to be redeemed, and, in the case of Bonds to be redeemed in part only such notice shall also specify the respective portions of the principal amount thereof to be redeemed, and, if applicable, that such redemption is conditioned upon the satisfaction of the conditions specified as provided in 2 below. Such notice of redemption shall further state that on such redemption date there shall become due and payable upon each Bond (or portion thereof) to be redeemed the Redemption Price thereof, together with interest accrued to the redemption date in the Currency in which the Bonds of such Series are payable, and that from and after such date, sufficient moneys being held by the Fiscal Agent in trust for the payment of such Redemption Price, interest thereon shall cease to accrue and be payable on the Bonds (or portions thereof) to be redeemed, unless, in the case of any conditional notice, the requisite conditions are not satisfied, and it will further state that the notice will comply with the requirements of the Securities Exchange Act of 1934, as amended, Release No. 34-23856, dated December 3, 1986, as long as such Release shall be in effect. The Fiscal Agent shall mail a copy of such notice, postage prepaid, no less than thirty (30) days before the redemption date, or such other period for any particular Bonds as may be provided by the Supplemental Resolution authorizing such Bonds, to the Owners of Bonds or portions of Bonds which are to be redeemed, at their last address, if any, appearing upon the registry books. Failure so to mail any such notice to any particular Owner shall not affect the validity of the proceedings for the redemption of Bonds not owned by such Owner and failure of any Owner to receive such notice shall not affect the validity of the proposed redemption of Bonds.

2. Any notice of optional redemption of Bonds given pursuant to this Section may be made conditional upon receipt by the Fiscal Agent of moneys sufficient to pay the Redemption Price of such Bonds in the Currency in which the Bonds of such Series are payable or upon the satisfaction of any other condition or the occurrence of any other event, which notice shall specify any such conditions or events. Any conditional notice so given may be rescinded at any time

before payment of such Redemption Price if any such condition is not satisfied or if any such other event does not occur. Notice of such rescission shall be given by the Fiscal Agent to affected Owners of Bonds, in the same manner as the conditional notice of redemption was given, as promptly as practicable after the System shall have notified the Fiscal Agent of the failure of such condition or the occurrence of such other event.

SECTION 406. Payment of Redeemed Bonds. Notice having been given in the manner provided in Section 405, the Bonds (or portions thereof) so called for redemption shall become due and payable on the redemption date so designated at the Redemption Price, plus interest accrued and unpaid to the redemption date in the Currency in which the Bonds of such Series are payable, and upon presentation and surrender thereof at the office specified in such notice, such Bonds (or portions thereof) shall be paid at the Redemption Price plus interest accrued and unpaid to the redemption date in the Currency in which the Bonds of such Series are payable, except to the extent the same shall not occur on account of a failure to comply with a condition or event stated in the notice to the Fiscal Agent pursuant to Section 402 and in the notice of redemption pursuant to Section 405. If there shall be called for redemption less than all of a Bond, the System shall execute and the Fiscal Agent shall authenticate and deliver, upon the surrender of such Bond, without charge to the Owner thereof, for the unredeemed balance of the principal amount of the Bond so surrendered. Bonds of like Series and maturity in any authorized denomination. If, on the redemption date, moneys for the redemption of all the Bonds (or portions thereof) of any like Series and maturity and interest rate to be redeemed, together with interest to the redemption date, shall be held by the Fiscal Agent so as to be available therefor on said date and if notice of redemption shall have been provided as aforesaid, and, with respect to any conditional notice of redemption, the conditions stated in the notice of redemption shall have been met and satisfied, then, from and after the redemption date, interest on the Bonds (or portions thereof) of such Series and maturity and interest rate so called for redemption shall cease to accrue and become payable. If said moneys shall not be so available on the redemption date, such Bonds (or portions thereof) shall continue to bear interest until paid at the same rate as they would have borne had they not been called for redemption.

SECTION 407. Cancellation and Disposition of Bonds. All Bonds paid or redeemed, either at or before maturity, shall be delivered to the Fiscal Agent when such payment or redemption is made, and such Bonds shall thereupon be promptly canceled. Bonds so canceled shall be disposed of by the Fiscal Agent, in accordance with the Fiscal Agent's standard procedures, and, upon request from the System, the Fiscal Agent shall execute a certificate of disposition in duplicate by the signature of one of its Authorized Officers describing the Bonds so disposed of, and one executed certificate shall be delivered to the System and the other executed certificate shall be retained by the Fiscal Agent.

# ARTICLE V PLEDGE, ASSIGNMENT AND SECURITY INTEREST; ESTABLISHMENT AND MAINTENANCE OF FUNDS AND ACCOUNTS AND APPLICATION THEREOF

SECTION 501. Pledge, Assignment and Security Interest.

1. The pledge and assignment of, and the grant of a security interest in and over, the Pledged Property, subject to Section 804, in favor of the Fiscal Agent for the benefit of the Bondholders and for the payment and as security for the payment of the Principal Installments and Redemption Price of and interest on the Bonds and payments due under Credit Facilities, and payments due under Liquidity Facilities and Qualified Hedges is hereby authorized, created and granted in accordance with the terms and provisions of this Resolution and

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subject to the provisions of this Resolution permitting the application of the Pledged Property for the purposes and on the terms and conditions set forth in this Resolution, and in each case subject to the provisions regarding priority of payment as between the Senior Bonds and the Subordinated Bonds. Nothing contained herein shall prevent a Credit Facility or Liquidity Facility from being provided with respect to any particular Bonds and not others. To further evidence such pledge, assignment and grant of security interest, the Fiscal Agent and the System shall cause the proper filing of the Security Agreement in accordance with the Uniform Commercial Code as in effect in Puerto Rico.

2. To the fullest extent provided by the Act and other applicable law, the pledge, assignment and grant of security interest provided by this Section shall be valid and binding, and the Pledged Property shall immediately be subject to the lien of this pledge, assignment and security interest without any physical delivery thereof or further act, and the lien of this pledge, assignment and security interest shall be valid and binding as against all parties having claims of any kind in tort, contract or otherwise against the System, irrespective of whether such parties have notice thereof.

 $\begin{tabular}{lll} SECTION 502. & Establishment & of & Fund & and \\ Accounts. & & & \\ \end{tabular}$ 

- 1. The "Project Fund" is hereby created and the following Accounts and Subaccounts are hereby created and established within the Project Fund, each of which shall have as a prefix "Employees Retirement System of the Government of the Commonwealth of Puerto Rico" and shall be held by the Fiscal Agent:
  - (1) Capitalized Interest Account,
  - (2) Revenue Account,
- (3) Debt Service Account, which, if there shall be any Subordinated Bonds Outstanding, shall be established for each Class of Bonds, and each of which shall contain therein a Principal Subaccount and an Interest Subaccount,
- (4) Debt Service Reserve Account, which, if there shall be any Subordinated Bonds Outstanding, shall be established for each Class of Bonds,
  - (5) General Reserve Account, and
- (6) Redemption Account, which, if there shall be any Subordinated Bonds Outstanding, shall be established for each Class of Bonds.
- 2. The System may establish and create such other Accounts in the Fund, or such other Subaccounts in any Account, as may be authorized pursuant to any Supplemental Resolution, including a Supplemental Resolution authorizing a Series of Bonds, and deposit therein such amounts as may from time to time be held for the credit of any Account or Subaccount.
- 3. Amounts held by the System or by the Fiscal Agent at any time in the Fund or any Accounts and Subaccounts established pursuant to this Section, as the case may be, shall be held in trust in separate Accounts and Subaccounts and shall be applied only in accordance with the provisions of this Resolution and the Act.

SECTION 503. Capitalized Interest Account.

- 1. There shall be deposited in the Capitalized Interest Account amounts, if any, determined as set forth in a Supplemental Resolution and as required by paragraph (xiii) of subsection 2 of Section 202 and authorizing the issuance of a Series of Bonds.
- 2. Moneys in the Capitalized Interest Account or any Subaccount thereof shall be transferred to the corresponding Interest Subaccount in the Debt Service Account on or prior to the Business Day preceding each Interest Payment Date in accordance with the requirements of the applicable Supplemental Resolution.
- 3. Any amounts on deposit in the Capitalized Interest Account or any Subaccount thereof and not set aside by the System, or set aside but determined by the System to be no longer required, to pay interest on a Series of Bonds, shall be withdrawn from such Account or Subaccount by the Fiscal Agent and deposited in the Revenue Account, as directed in writing by the System.
- 4. In the event of the refunding of any Bonds, the System may withdraw from the Capitalized Interest Account related to the Bonds to be refunded all or any portion of amounts accumulated therein with respect to such Bonds and deposit such amounts as provided in a written direction of the System; *provided, however*, that such withdrawal shall not be made unless immediately thereafter the Bonds being refunded shall be deemed to have been paid pursuant to Section 1301.

### SECTION 504. Revenue Account.

On the last Business Day of the month, the System will transfer the Employers' Contributions to the Fiscal Agent. Immediately thereafter, but in any case no later than the next Business Day following the transfer by the System of the Employers' Contributions, all Revenues shall be deposited into the Revenue Account except as provided by Section 602.3; provided, however, that the proceeds of any draw on or payment under any Credit Facility which is intended for the payment of a Bond may be applied directly to such payment or deposited directly to the Debt Service Account for such purpose. In addition, there shall be deposited in the Revenue Account all other amounts required by this Resolution to be so deposited. After payment to the Fiscal Agent of all amounts payable to the Fiscal Agent pursuant to Section 804, amounts on deposit from time to time in the Revenue Account shall be withdrawn and deposited as follows and in the following order of priority:

FIRST: to the Senior Bonds Debt Service Account, allocated between the Principal Subaccount and the Interest Subaccount, pro rata on the basis of the maximum amount required be held in each such Subaccount at the time of deposit, all amounts until the amount on deposit in the Senior Bonds Debt Service Account shall equal the Accrued Payment Obligation related to all Senior Bonds and Parity Obligations;

SECOND: to the Senior Bonds Debt Service Reserve Account, the amount required to cause the amount on deposit therein to be equal to the Debt Service Reserve Requirement related to the Senior Bonds;

THIRD: to the Subordinated Bonds Debt Service Account, allocated between the Principal Subaccount and the Interest Subaccount, pro rata on the basis of the maximum amount required be held in each such Subaccount at the time of deposit, all amounts until the amount on deposit in the Subordinated Bonds Debt Service Account shall equal the Accrued Payment Obligation related to all Subordinated Bonds and Parity Obligations;

FOURTH: to the Subordinated Bonds Debt

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Service Reserve Account, the amount required to cause the amount on deposit therein to be equal to the Debt Service Reserve Requirement related to the Subordinated Bonds;

FIFTH: to the payment of Operating Expenses; and

SIXTH: to the General Reserve Account, subject to the requirements established in Section 509 below, the balance of the amount so withdrawn.

- 2. Investment and interest earnings in each Fund, Account or Subaccount shall be applied to such Fund, Account or Subaccount pursuant to Section 602.
- 3. In the event that amounts are required to be paid to providers of Qualified Hedges, Credit Facilities or Liquidity Facilities which do not represent scheduled payments or reimbursements in accordance with the terms of the related contracts, but represent costs, indemnities, termination payments or similar non-recurring amounts, or in the event such unscheduled amounts are due to such providers and there are insufficient funds held hereunder and available for the payment thereof, the System shall provide written notice thereof to the Fiscal Agent so that such amounts are paid from the General Reserve Account, subject to the provisions of Section 509 hereof.
- 4. Operating Expenses shall be paid by the Fiscal Agent to the System pursuant to a requisition form signed by an Authorized Officer of the System and delivered to the Fiscal Agent detailing those expenses to be paid and that such expenses are permitted Operating Expenses payable under the Resolution.

SECTION 505. Debt Service Account.

- 1. There shall be transferred from the Revenue Account, and deposited into the Interest Subaccount and the Principal Subaccount of each Debt Service Account, the amounts required to be so transferred pursuant to paragraphs FIRST and THIRD of Section 504.1.
- 2. There also shall be deposited into the Interest Subaccount of a Debt Service Account, if necessary, the following:
  - (i) Such amount determined by the applicable Supplemental Resolution representing accrued interest received upon the sale of a Series of Bonds.
  - (ii) Amounts transferred from the General Reserve Account pursuant to Section 509.2 for the payment of interest on the Bonds and the interest component of Parity Obligations.
  - (iii) Amounts transferred from any Debt Service Reserve Account pursuant to Section 506.2 for the payment of interest on the Bonds and the interest component of Parity Obligations, to the extent other funds (including, but not limited to any amounts in the General Reserve Account) are not available to pay when due the interest on such Bonds and the interest component of Parity Obligations.
- 3. There also shall be deposited into the Principal Account of a Debt Service Account, if necessary, the following:
  - (i) Amounts transferred from the General Reserve Account pursuant to Section 509.2 for the payment of Principal Installments on the

Bonds and the principal component of Parity Obligations.

- (ii) Amounts transferred from the Debt Service Reserve Account pursuant to Section 506.2 for the payment of Principal Installments of the Bonds and the principal component of Parity Obligations, to the extent other funds (including, but not limited to any amounts in the General Reserve Account and the Redemption Account (see (ii) below)) are not available to pay when due the Principal Installments of such Bonds and the principal component of Parity Obligations.
- (iii) Amounts transferred from the Redemption Account pursuant to Section 508 for the payment of Principal Installments of any Bonds.
- The Fiscal Agent shall pay out of the Interest Account, to the Persons entitled thereto, in the Currency in which the Bonds of such Series are payable, (i) the interest on the Bonds as and when due and payable, and (ii) the interest component of Parity Obligations at the times, in each case in the manner and on the other terms and conditions as determined by the System and set forth in written directions of an Authorized Officer of the System delivered to the Fiscal Agent; provided, however, that amounts deposited to the Interest Account pursuant to clause (i) of paragraph 2 of this Section shall not be used to pay the interest component of Parity Obligations; and provided further, however, that if the amount available shall not be sufficient to pay in full all such interest due on the same date, then out of such available amount the Fiscal Agent shall make such payments under Bonds and Parity Obligations ratably, according to the amounts due on such date, without any discrimination or preference.
- The Fiscal Agent shall pay out of the Principal Account, to the Persons entitled thereto, in the Currency in which the Bonds of such Series are payable. (i) each Principal Installment for the Bonds (including the Redemption Price payable upon mandatory redemption out of Sinking Fund Installments) as and when due and payable, and (ii) the principal component of Parity Obligations, in each case described in this clause (ii) at the times, in the manner and on the other terms and conditions as determined by the System and set forth in written directions of an Authorized Officer of the System delivered to the Fiscal Agent; provided, however, that amounts deposited to the Principal Account pursuant to clause (ii) of paragraph 3 of this Section shall not be used to pay the principal component of Parity Obligations; and provided further, however, that if the amount available shall not be sufficient to pay in full all such Principal Installments and principal due on the same date, then out of such available amount the Fiscal Agent shall make such payments under Bonds and Parity Obligations ratably, according to the amounts due on such date, without any discrimination or preference.
- 6. In the event of the refunding of any Bonds, the Fiscal Agent shall, upon the written direction of an Authorized Officer of the System delivered to the Fiscal Agent, withdraw from the Debt Service Account all or any portion of amounts accumulated therein with respect to the Bonds to be refunded and deposit such amounts as provided in such written direction; provided, however, that such withdrawal shall not be made unless immediately thereafter the Bonds being refunded shall be deemed to have been paid pursuant to Section 1301.
- 7. If there is a deficiency in any Debt Service Account identified in connection with the valuation performed by the Fiscal Agent pursuant to Section 603, the Fiscal Agent shall immediately thereafter, and in any case no later than five Business Days prior to the date any payment obligation is due on the Bonds, notify the System of such deficiency. The System hereby instructs the Fiscal Agent to cover any such deficiency by transferring moneys first, from the General Reserve Account; and

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if such moneys are not sufficient to cover such deficiency, second, from the Debt Service Reserve Account for such Class of Bonds. In the case of a deficiency in the Debt Service Account for the Senior Bonds, if moneys in the General Reserve Account or the Senior Bonds Debt Service Reserve Account are not sufficient to cover any deficiency, the System hereby instructs the Fiscal Agent to transfer moneys first, from the Subordinated Bonds Debt Service Account and second, from the Subordinated Bonds Debt Service Reserve Account.

SECTION 506. Debt Service Reserve Account.

- 1. At the time any Series of Bonds is delivered pursuant to this Resolution or any Supplemental Resolution, the System shall pay into the applicable Debt Service Reserve Account from the proceeds of such Bonds or other available funds, the amount, if any, necessary for the amount on deposit in such Debt Service Reserve Account to equal the Debt Service Reserve Requirement applicable to all Outstanding Bonds of such Class plus such additional Bonds being delivered, after giving effect to any Reserve Account Cash Equivalent, calculated immediately after the delivery of such Bonds.
- Except as otherwise provided by any Supplemental Resolution, amounts on deposit in a Debt Service Reserve Account shall be applied, to the extent other funds (including, but not limited to any amounts in the General Reserve Account) are not available therefor pursuant to this Resolution and the applicable Supplemental Resolution, to pay when due the Principal Installments and Redemption Price of and the interest on the Outstanding Bonds of the related Class and the principal and interest components of Parity Obligations, by transfer, in the Currency in which such Outstanding Bonds are payable, to the Debt Service Account or the Redemption Account, as applicable. To the extent other funds (including, but not limited to any amounts in the General Reserve Account) are not available therefor pursuant to this Resolution and the applicable Supplemental Resolution to pay when due the Principal Installments and Redemption Price of and the interest on the Outstanding Senior Bonds and the principal and interest components of Parity Obligations, the Fiscal Agent shall, and is hereby directed by the System to transfer, amounts on deposit in the Subordinated Bonds Debt Service Reserve Account and the Subordinated Bonds Debt Service Account to the Senior Bonds Debt Service Account, before being applied to the payment of the Principal Installments and Redemption Price of and the interest on the Outstanding Subordinated Bonds and the Subordinate Obligations.
- 3. Whenever the amount in any Debt Service Reserve Account for a particular Class of Bonds exceeds the related Debt Service Reserve Requirement, after giving effect to any Reserve Account Cash Equivalent, the Fiscal Agent shall, and is hereby directed by the System to, withdraw from such Debt Service Reserve Account the amount of such excess and deposit the moneys so withdrawn into the Revenue Account.
- 4. To the extent funds are not available in other funds or accounts, moneys may and, upon the written direction of an Authorized Officer of the System delivered to the Fiscal Agent, shall be withdrawn from the Debt Service Reserve Account by the Fiscal Agent and deposited in the Redemption Account for the purchase or redemption of Bonds at any time, *provided* that subsequent to such purchase or redemption the amount in the Debt Service Reserve Account, after giving effect to any Reserve Account Cash Equivalent, will not be less than the related Debt Service Reserve Requirement. In the event of the refunding of any Bonds, the Fiscal Agent shall, upon the written direction of an Authorized Officer of the System, withdraw from the related Debt Service Reserve Account all or any portion of amounts accumulated therein with respect to the Bonds being

refunded and apply such amounts in accordance with such direction; provided, however, that such withdrawal shall not be made unless (i) immediately thereafter the Bonds being refunded shall be deemed to have been paid pursuant to Section 1301, and (ii) the amount remaining in the Debt Service Reserve Account, after giving effect to any Reserve Account Cash Equivalent, after such withdrawal shall not be less than the related Debt Service Reserve Requirement.

- If, as of the last Business Day of each calendar month, a deficiency exists in the Senior Bonds Debt Service Reserve Account, identified in connection with the valuation performed by the Fiscal Agent pursuant to Section 603 hereof, the Fiscal Agent shall transfer from the General Reserve Account to the Senior Bonds Debt Service Reserve Account the amount, if any, required to cause the balance in said Account to equal the Debt Service Reserve Requirement for the Senior Bonds after giving effect to any Reserve Account Cash Equivalent. Thereafter, if, as of the last Business Day of each calendar month, a deficiency exists in the Subordinated Bonds Debt Service Reserve Account, the Fiscal Agent shall transfer from the General Reserve Account to the Subordinated Bonds Debt Service Reserve Account, after all deposits required by paragraphs FIRST, SECOND, THIRD and FOURTH of Section 504.1 have been made, the amount, if any, required to cause the balance in said Account to equal the Debt Service Reserve Requirement for the Subordinated Bonds, after giving effect to any Reserve Account Cash Equivalent.
- Whenever the amount in all Debt Service Reserve Accounts, without giving effect to any Reserve Account Cash Equivalent, together with the amount in all Debt Service Accounts, is sufficient to pay in full all Outstanding Bonds in accordance with their terms (including the maximum amount of Principal Installments and interest which could become payable thereon) and all amounts due and owing to Credit Facility Providers, the funds on deposit in the Debt Service Reserve Accounts shall be transferred to the Debt Service Account established for the same Class, in accordance with the written direction of an Authorized Officer of the System delivered to the Fiscal Agent, and thereupon no further deposits shall be required to be made into the Debt Service Reserve Accounts. Prior to said transfer, all investments held in the Debt Service Reserve Accounts shall be liquidated to the extent necessary in order to provide for the timely payment of the Principal Installments of and interest on Bonds, in accordance with the written direction of an Authorized Officer of the System delivered to the Fiscal Agent.
- Reserve Account Equivalents may be deposited in a Debt Service Reserve Account as provided in this paragraph. In lieu of any required transfers of moneys to the Debt Service Reserve Account, the System may cause to be deposited into the Debt Service Reserve Account a Reserve Account Cash Equivalent in an aggregate amount equal to the difference between the Debt Service Reserve Requirement and the sums of moneys or value of Investment Securities then on deposit in the Debt Service Reserve Account, if any. In lieu of retaining all or any portion of the moneys theretofore on deposit in the Debt Service Reserve Account, the System may cause to be deposited into the Debt Service Reserve Account a Reserve Account Cash Equivalent in an aggregate amount equal to such moneys, subject to paragraph 3 of this Section. Each Reserve Account Cash Equivalent shall be payable (upon the giving of notice as required thereunder) on any date on which moneys may be required to be withdrawn from the Debt Service Reserve Account. If a disbursement is made pursuant to a Reserve Account Cash Equivalent, the System shall either (i) reinstate the maximum limits of such Reserve Account Cash Equivalent or (ii) deposit into the Debt Service Reserve Account moneys in the amount of the disbursement made under such Reserve Account Cash Equivalent, or a combination of such alternatives, at the times and in the amounts required by paragraph 5 of this Section. In the event that

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the rating attributable to any provider of any Reserve Account Cash Equivalent shall fall below that required in the definition thereof, such Reserve Account Cash Equivalent shall no longer be deemed to be a Reserve Account Cash Equivalent and the System shall either (i) replace such Reserve Account Cash Equivalent with a Reserve Account Cash Equivalent which shall meet the requirements therefor or (ii) deposit into the Debt Service Reserve Account sufficient moneys, or a combination of such alternatives, at the times and in the amounts required by paragraph 5 of this Section.

8. Notwithstanding anything to the contrary contained in this Section, if amounts obtained under a Credit Facility or Reserve Account Cash Equivalent are to be used to pay the Principal Installments and Redemption Price of and interest on Bonds, then the providers of such Credit Facility or Reserve Account Cash Equivalent shall be subrogated to the rights of the relevant Bondholders, and amounts in the Debt Service Reserve Account which would otherwise have been used for such purposes may be applied, to the extent such amounts would have been used for such purpose in accordance with the priorities set forth herein, to reimburse the provider of such Credit Facility or Reserve Account Cash Equivalent for the amounts so obtained.

SECTION 507. Satisfaction of Sinking Fund Installments.

- 1. Any amount accumulated in the Debt Service Account up to the unsatisfied balance of each Sinking Fund Installment for Bonds may and, if so directed in writing by an Authorized Officer of the System, shall be applied (together with amounts accumulated in the Debt Service Account with respect to interest on the Bonds for which such Sinking Fund Installment was established) by the Fiscal Agent prior to the forty-fifth day preceding the due date of such Sinking Fund Installment as follows:
  - (i) to the purchase of Bonds of the maturity and interest rate for which such Sinking Fund Installment was established, at prices (including any brokerage and other charges) not exceeding the principal amount (or Maturity Amount, if applicable) of such Bonds plus unpaid interest accrued to the date of purchase, such purchases to be made in such manner as the Fiscal Agent shall determine; or
  - (ii) to the redemption of such Bonds if then redeemable by their terms at the price equal to the principal amount (or Maturity Amount, if applicable) of such Bonds plus unpaid interest accrued to the date of redemption.
- Upon the purchase or redemption of any Bond pursuant to paragraph 1 of this Section, an amount equal to the principal amount (or Maturity Amount, if applicable) of the Bonds so purchased or redeemed shall be credited toward the next Sinking Fund Installment thereafter to become due with respect to the Bonds of such maturity and interest rate and the amount of any excess of the amounts so credited over the amount of such Sinking Fund Installment shall be credited by the Fiscal Agent against future Sinking Fund Installments in direct chronological order, unless otherwise instructed in writing by an Authorized Officer of the System at the time of such purchase or redemption. Concurrently with the delivery of such Bonds, the System shall deliver to the Fiscal Agent a certificate of an Authorized Officer of the System specifying (i) the principal amount (or Maturity Amount, if applicable), Series, maturity, interest rate and numbers of the Bonds so delivered, (ii) the date of the Sinking Fund Installment in satisfaction of which such Bonds are so delivered, (iii) the aggregate principal amount (or Maturity Amount, if applicable) of the Bonds so delivered, and (iv) the

unsatisfied balance of such Sinking Fund Installment after giving effect to the delivery of such Bonds.

- In satisfaction, in whole or in part, of any Sinking Fund Installment, the System may deliver to the Fiscal Agent at least forty-five (45) days prior to the date of such Sinking Fund Installment, for cancellation, Bonds acquired by purchase of the Series and maturity and interest rate entitled to such Sinking Fund Installment. All Bonds so delivered to the Fiscal Agent in satisfaction of a Sinking Fund Installment shall reduce the amount of such Sinking Fund Installment by the aggregate principal amount (or Maturity Amount, if applicable) of such Bonds. Concurrently with such delivery of such Bonds the System shall deliver to the Fiscal Agent a certificate of an Authorized Officer of the System specifying (i) the principal amount (or Maturity Amount, if applicable), Series, maturity, interest rate and numbers of the Bonds so delivered, (ii) the date of the Sinking Fund Installment in satisfaction of which such Bonds are so delivered, (iii) the aggregate principal amount (or Accreted Amount, if applicable) of the Bonds so delivered, and (iv) the unsatisfied balance of each such Sinking Fund Installment after giving effect to the delivery of such Bonds.
- 4. In the event that Bonds are redeemed prior to maturity pursuant to any Section hereof other than Section 403, the Fiscal Agent shall credit the principal amount (or Accreted Amount, if applicable) of the Bonds so redeemed against Sinking Fund Installments due hereunder; provided, however, that the System shall have delivered to the Fiscal Agent, at least forty-five (45) days prior to the date of such Sinking Fund Installment, a certificate of an Authorized Officer of the System specifying (i) the principal amount, Series, maturity, interest rate and number of each Bond so redeemed, (ii) the date of each Sinking Fund Installment in satisfaction of which such redeemed Bonds are credited, (iii) the aggregate principal amount (or Accreted Amount, if applicable) of the Bonds so redeemed, and (iv) the unsatisfied balance of each such Sinking Fund Installment after giving effect to the redemption of such Bonds.
- 5. The Fiscal Agent shall, upon receipt of the notice specified by Section 403 and in the manner provided in Article IV, call for redemption on the date of each Sinking Fund Installment falling due prior to maturity such principal amount (or Accreted Amount, if applicable) of Bonds of the Series and maturity entitled to such Sinking Fund Installment as is required to exhaust the unsatisfied balance of such Sinking Fund Installment. The Fiscal Agent shall redeem such Bonds pursuant to Section 403.

SECTION 508. Redemption Account; Amounts to be Deposited Therein.

- 1. The following, upon receipt thereof, shall be deposited into the Redemption Account for the purpose of redeeming Outstanding Bonds at the option of the System:
  - (i) amounts determined pursuant to paragraph 3 of Section 504; and
  - (ii) amounts transferred from the Debt Service Reserve Accounts pursuant to Section 506 for the payment of the Redemption Price of Bonds.
- 2. Subject to the limitations contained in paragraph 4 of this Section, if, on the last Business Day preceding any interest payment date for the Senior Bonds, Principal Installment due date for such Bonds, or due date of interest or principal components of Parity Obligations, the amount on deposit in the Senior Debt Service Account shall be less than

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the interest on such Bonds due on such interest payment date, the Principal Installment for such Bonds due on such Principal Installment due date, or the interest or principal components of Parity Obligations due on the due date thereof, and after taking into account transfers from the General Reserve Account, the Senior Bonds Debt Service Reserve Account, the Subordinated Bonds Debt Service Account and the Subordinated Bonds Debt Service Reserve Account, then the Fiscal Agent, shall, and is hereby instructed by the System to, transfer from the Senior Bonds Redemption Account to the Senior Bonds Debt Service Account an amount (or all of the moneys in the Senior Bonds Redemption Account if less than the amount required) which will be sufficient to make up such deficiency in the Senior Bonds Debt Service Account.

- Subject to the limitations 3. contained in paragraph 4 of this Section, if, on the last Business Day preceding any interest payment date for the Subordinated Bonds, Principal Installment due date for such Bonds, or due date of interest or principal components of Subordinate Obligations, the amount on deposit in the Subordinated Debt Service Account shall be less than the interest on such Bonds due on such interest payment date, the Principal Installment for such Bonds due on such Principal Installment due date, or the interest or principal components of Subordinate Obligations due on the due date thereof, then the Fiscal Agent, shall, and is hereby instructed by the System to, transfer from the Subordinated Bonds Redemption Account to the Subordinated Bonds Debt Service Account an amount (or all of the moneys in the Subordinated Bonds Redemption Account if less than the amount required) which will be sufficient to make up such deficiency in the Subordinated Bonds Debt Service Account.
- 4. To the extent not required to make up a deficiency as required in paragraph 2 of this Section, amounts in the Redemption Account shall be applied by the Fiscal Agent, as promptly as practicable after delivery to it of written instructions from an Authorized Officer of the System, to the purchase or redemption (including the payment of redemption premium, if any) of any particular Class of Bonds. Interest on Bonds so purchased or redeemed shall be paid from the Debt Service Account and all expenses in connection with such purchase or redemption shall be paid by the System from moneys held in the General Reserve Account.
- 5. The transfers required by paragraph 2 of this Section shall be made from amounts in the Redemption Account only to the extent that such amounts are not then required to be applied to the redemption of Bonds for which notice of redemption shall have been given pursuant to Section 405, unless such notice is conditioned upon the availability of moneys on deposit in the Redemption Account.

#### SECTION 509. General Reserve Account.

- 1. There shall be transferred from the Revenue Account, after all deposits required by paragraphs FIRST through FIFTH of Section 504.1 have been made, all excess moneys into the General Reserve Account pursuant to paragraph SIXTH of Section 504.1.
- 2. Except as otherwise provided by any Supplemental Resolution, amounts on deposit in the General Reserve Account shall be applied, to the extent funds are not available therefor in the Debt Service Account of any particular Class of Bonds, to pay when due the Principal Installments and Redemption Price of and the interest on the Outstanding Bonds of the related Class and the principal and interest components of Parity Obligations, by transfer, in the Currency in which such Outstanding Bonds are payable to such Debt Service Account or Redemption Account, as applicable.

- 3. Any moneys remaining in the General Reserve Account at any time and not deposited, transferred or retained as set forth in Section 504.1, may be (i) transferred to the Revenue Account, (ii) transferred to the Redemption Account, or (iii) used for (I) the payment or reimbursement of Financing Costs, (II) the purchase of Bonds, or (III) any combination of the foregoing, in each case as directed in writing by an Authorized Officer of the System to the Fiscal Agent.
- 4. Purchases of Bonds shall be made upon the written direction of an Authorized Officer of the System, with or without advertisement and with or without notice to other Owners of Bonds pursuant to the provisions of Section 507. Such purchases shall be made at such price or prices as determined by such written instructions. If Sinking Fund Installments have been established for the maturities of Bonds purchased by the System, then the Fiscal Agent, upon written instructions from an Authorized Officer of the System, shall credit the principal amount purchased against future Sinking Fund Installments in direct chronological order, unless otherwise instructed in writing by an Authorized Officer of the System at the time of such purchase.
- Whenever the amount in the General Reserve Account, together with the amount in all Debt Service Accounts, is sufficient to pay in full all Outstanding Bonds in accordance with their terms (including the maximum amount of Principal Installments and interest which could become payable thereon) and all amounts due and owing to Credit Facility Providers, the funds on deposit in the General Reserve Account shall be transferred, in the Currency in which such Bonds are payable, in accordance with the written direction of an Authorized Officer of the System delivered to the Fiscal Agent, to the Debt Service Account established for the same Class. Prior to said transfer, all investments held in the General Reserve Accounts shall be liquidated, in accordance with the written direction of an Authorized Officer of the System delivered to the Fiscal Agent, to the extent necessary in order to provide for the timely payment of the Principal Installments of and interest on Bonds.
- Except as provided in paragraph 509.7 below, as long as any Bonds are Outstanding, moneys held in the General Reserve Account may only be transferred to the System once per year as of the last Business Day of the Bond Year, if (i) during the Bond Year, there has been no withdrawal from a Debt Service Reserve Account to fund the Debt Service Account for any Class of Bonds; (ii) the balance in the Debt Service Account for each Class of Bonds is not less than the amount required to pay in full the next Accrued Payment Obligation due on each Class of Bonds; (iii) the balance in the Debt Service Reserve Account for each Class of Bonds is not less than the corresponding Debt Service Reserve Requirement; (iv) there are no outstanding amounts due to the Fiscal Agent under this Resolution or any Supplemental Resolution; and (v) the balance in the General Reserve Account is not less than ten percent (10%) of the next Bond Year's Accrued Payment Obligation for all Outstanding Bonds on the last Business Day of the Bond Year. If these conditions are met, the Fiscal Agent may withdraw from the General Reserve Account and transfer to the System the amount in excess of ten percent (10%) of such Accrued Payment Obligation.
- 7. Notwithstanding the preceding paragraph, there may be no transfers from the General Reserve Account to the System during any period in which the Employers' Contribution Rate is below 9.275% of Covered Payroll. The System shall notify the Fiscal Agent of any reduction of the Employers' Contribution Rate.
- 8. Assuming compliance with paragraph 5 and 6 above, should the balance to the credit of the General Reserve Account exceed (a) twenty-five percent (25%) or (b) if Subordinated Bonds are Outstanding, fifty percent (50%) of the next Bond Year's Accrued Payment Obligation for all Classes

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of Bonds Outstanding, transfers may be made by the Fiscal Agent to the System at any time during a Bond Year upon written notice from the System to the Fiscal Agent and Government Development Bank for Puerto Rico. No such transfer may, however, reduce the General Reserve Account balance below (1) ten percent (10%) or (2) if Subordinated Bonds are Outstanding, twenty-five percent (25%) of the next Bond Year's Accrued Payment Obligation for all Classes of Bonds Outstanding.

### ARTICLE VI SECURITY FOR DEPOSITS AND INVESTMENT OF FUNDS

SECTION 601. Security for Deposits. moneys held hereunder by the Fiscal Agent shall be continuously and fully secured, for the benefit of the System and the Owners of the Bonds and Parity Obligations in such manner as may then be required by applicable federal, Commonwealth or state laws and regulations regarding security, by Investment Obligations of a market value at least equal at all times to the amount of the deposit so held by the Fiscal Agent; provided, however, that it shall not be necessary, unless required by applicable law, for the Fiscal Agent to give security for the deposit of any moneys with them held in trust and set aside for the payment of the principal or Redemption Price of, or interest on, any Bonds, or for the Fiscal Agent to give security for any moneys which shall be represented by obligations purchased under the provisions of this Resolution as an investment of such moneys. The Fiscal Agent shall have no obligation for the payment of interest on moneys properly held by it uninvested hereunder.

SECTION 602. Investment of Funds, Accounts and Subaccounts Held by the Fiscal Agent.

Moneys in any Fund, Account or 1. Subaccount held by the Fiscal Agent shall be continuously invested and reinvested or deposited and redeposited by the Fiscal Agent upon the written direction of an Authorized Officer of the System. The System shall direct the Fiscal Agent to invest and reinvest the moneys in any Fund, Account or Subaccount held by the Fiscal Agent in Investment Obligations so that the maturity date or date of redemption of such Investment Obligations shall coincide as nearly as practicable with the times at which moneys are anticipated to be needed to be expended hereunder, except that any Investment Obligation may be credited to more than one Fund, Account or Subaccount based upon the portions thereof purchased by or allocable to each such Fund, Account or Subaccount and need not be sold in order to provide for the transfer of amounts from one Fund, Account or Subaccount to another. Investment Obligations purchased by the Fiscal Agent shall be held by it, or for its account as Fiscal Agent. The Fiscal Agent, at the written direction of the System as to specific investments, shall sell, or present for redemption, any Investment Obligations purchased by it as an investment hereunder whenever it shall be necessary in order to provide moneys to meet any payment from such Fund, Account or Subaccount. The Fiscal Agent shall have no obligation to invest, reinvest, deposit, redeposit or sell investments contemplated hereby except upon the written direction of an Authorized Officer of the System as to specific investments. The Fiscal Agent shall have no liability for interest on any money received by it hereunder (except as otherwise agreed in writing with the System and except that the Fiscal Agent shall invest such money as required pursuant to written direction of an Authorized Officer of the System) and no responsibility for any loss (after giving effect to any interest or other income thereon except to the extent theretofore paid to the System) incurred on the sale of such investments. The Fiscal Agent shall advise the System in writing on or before the twentieth (20th) day of each calendar month, of all investments held for the credit of each Fund, Account or Subaccount in its custody under the provisions of this Resolution as of the end of the preceding month.

- 2. Investment Obligations purchased under the provisions of this Resolution as an investment of moneys in any Fund, Account or Subaccount shall be deemed at all times to be a part of such Fund, Account or Subaccount and, unless otherwise expressly provided in this Resolution or any Supplemental Resolution, the income or interest earned and gains realized in excess of losses suffered by any Fund, Account or Subaccount due to the investment thereof shall be deposited in such Fund, Account or Subaccount. The Fiscal Agent shall keep records of all such amounts deposited in any such Fund, Account or Subaccount to indicate the source of the income or earnings.
- 3. The Fiscal Agent shall sell, or present for redemption or exchange, any Investment Obligation purchased by it pursuant to this Resolution or any Supplemental Resolution whenever it shall be requested in writing by an Authorized Officer of the System to do so or whenever it shall be necessary in order to provide moneys to meet any payment or transfer from the Fund, Account or Subaccount for which such investment was made, except that any Investment Obligation may be credited to more than one Fund, Account or Subaccount based upon the portions thereof purchased by or allocable to each such Fund, Account or Subaccount and need not be sold in order to provide for the transfer of amounts from one Fund, Account or Subaccount to another.
- 4. Nothing in this Resolution shall prevent any Investment Obligations acquired hereunder from being held in book-entry form on the books of the Treasury of the United States or of any national securities depository.
- 5. In the event that the Fiscal Agent has not, prior to 11:00 a.m. (Eastern time) on any Business Day, received investment instructions as provided herein as to any investment proceeds received hereunder, the Fiscal Agent shall invest the same in Investment Obligations having the shortest available maturity, in accordance with standing instructions received from an Authorized Officer of the System.

 $\begin{tabular}{ll} SECTION~603. & Valuation & and & Sale & of \\ Investments. & \end{tabular}$ 

- Fund, Account or Subaccount, obligations purchased as an investment of moneys therein shall be valued by the Fiscal Agent at Amortized Value on the last Business Day of each month. Accrued interest received upon the sale of any Investment Obligation shall be treated as income from such Investment Obligation for purposes of this Section, except to the extent that such accrued interest represents the repayment of accrued interest paid upon purchase of such Investment Obligations.
- 2. Immediately after each such valuation performed pursuant to Section 603.1, any balance in any Debt Service Reserve Account in excess of the applicable Debt Service Reserve Fund Requirement, shall be transferred by the Fiscal Agent to the Revenue Account.
- 3. The Fiscal Agent shall immediately notify the System in writing of any deficiency in the Debt Service Account or Debt Service Reserve Account that appears from the valuation performed by the Fiscal Agent pursuant to Section 603.1.
- 4. The Fiscal Agent shall not be liable or responsible for the making of any investment authorized by the provisions of this Article, in the manner provided in this Article, or for any loss resulting from any such investment so made or disposed of in the manner provided in this Article.

### ARTICLE VII PARTICULAR COVENANTS OF THE SYSTEM

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The System covenants and agrees with the Fiscal Agent and the Bondowners as follows:

SECTION 701. Payment of Obligations. System shall duly and punctually pay or cause to be paid the principal of and premium, if any, on every Bond and the interest thereon, and all Parity Obligations and Subordinate Obligations, on the date(s), at the place(s) and in the manner mentioned in the Act, this Resolution, the applicable Supplemental Resolution, the Bonds, and applicable Credit Facilities, Liquidity Facilities, and Qualified Hedges according to the true intent and meaning thereof, and shall duly and punctually satisfy all Sinking Fund Installments which may be established for any Series, subject to the provisions of Section 201. Furthermore, the System covenants to perform all acts and enforce all its powers under the Act in order to promptly collect and remit the Employers' Contributions to the Fiscal Agent. In addition, the System covenants to enter into a Memorandum of Understanding with Government Development Bank for Puerto Rico to establish inter-agency mechanisms in order to make sure that Employers are current in their payments to the System.

SECTION 702. Extension of Payment of Bonds. The System shall not directly or indirectly extend or assent to the extension of the maturity of any of the Bonds or claims for interest by the purchase or funding of such Bonds or by any other arrangement. Nothing herein shall be deemed to limit the right of the System (i) to issue Option Bonds or Refunding Bonds as provided in herein, and such issuance shall not be deemed to constitute an extension of maturity of Bonds, or (ii) to apply any amount in the Debt Service Account or the Redemption Account to the purchase or redemption of Bonds as provided in this Resolution.

SECTION 703. Offices for Servicing Bonds. The Fiscal Agent shall at all times maintain one or more offices or agencies where notices, demands and other documents may be served upon the System in respect of the Bonds or of this Resolution. The System hereby appoints the Fiscal Agent as its agent to receive such notices, demands and documents.

SECTION 704. Further Assurance. At any and all times the System shall, so far as it may be authorized by law, pass, make, do, execute, acknowledge and deliver, all and every such further resolutions, acts, deeds, conveyances, assignments, transfers and assurances and record the same in any office or register as may be necessary or desirable for the better assuring, conveying, granting, assigning and confirming all and singular the rights and other moneys, securities and funds hereby pledged or assigned, or intended so to be, or which the System may become bound to pledge or assign and, if required by law, to perfect the security interest created thereby.

SECTION 705. Power to Issue Bonds and Assign Funds and Accounts. The System is duly authorized under the Act to create and issue the Bonds and to adopt this Resolution and to create a security interest on the Pledged Property in the manner and to the extent provided in this Resolution. The Pledged Property is and will be free and clear of any pledge, lien, charge or encumbrance thereon or with respect thereto except as permitted by this Resolution, and all action on the part of the System to that end has been and will be duly and validly taken. The Bonds are and will be the valid and legally binding special obligations of the System, enforceable in accordance with their terms and the terms of this Resolution. The System shall at all times, to the extent permitted by law, defend, preserve and protect the assignment of the Pledged Property and all the rights of the Fiscal Agent, the Beneficiaries and the Bondowners under this Resolution against all claims and demands of all persons whomsoever.

SECTION 706. Creation of Liens. Until the security interest created in Section 501 of this Resolution shall be

discharged and satisfied as provided in Section 1301, the System shall not (i) issue any bonds or other evidences of indebtedness, other than the Bonds, secured by the Pledged Property, nor create or cause to be created any lien or charge on the Pledged Property, other than as permitted by this Resolution, nor (ii) at any time when the System is in default in making any payment required to be made under this Resolution or maintaining the balance in any Fund, Account or Subaccount required to be maintained in the amount required therefor by this Resolution, set apart or appropriate and pay any amount from any Fund, Account or Subaccount, except as required by this Resolution. The System may not issue Bonds with a payment priority or claim against the Pledged Property that is senior to that of the Senior Bonds. The System, in its discretion, may determine to execute and deliver Subordinated Bonds or Subordinate Obligations, subject to compliance with Section 708 or 204 hereof.

#### SECTION 707. Accounts and Reports.

1. The System shall keep proper books of record and account (separate from all other records and accounts) in which complete and correct entries shall be made of its transactions relating to the Pledged Property and each Fund, Account and Subaccount established under this Resolution, and which, together with all books and papers of the System relating to the issuance of the Bonds, shall at all reasonable times during normal business hours be subject to the inspection of the Fiscal Agent (it being understood that the Fiscal Agent shall have no duty so to inspect).

2. The System shall file with the Fiscal Agent and the Ancillary Facility Providers forthwith upon becoming aware of any Event of Default, or the occurrence of any event which with notice or lapse of time or both would be an Event of Default, in the performance by the System of any covenant, agreement or condition contained in this Resolution, a certificate signed by an Authorized Officer of the System specifying such Event of Default or other event as described in this paragraph, and if any such Event of Default or other such event shall so exist, specifying the nature and status of such Event of Default or other such event.

SECTION 708. Issuance of Additional Bonds. The System may issue additional Bonds, from time to time, in one or more Series within any Class, on a parity with each such Series of Bonds within such Class, and secured by the Pledged Property, upon meeting the following requirements:

1. There shall have been delivered to the Fiscal Agent the following documents:

(i) report "Consultant's Report") from a nationally independent, recognized, economic consultant, dated no earlier than 12 months before the date of issuance of the additional Bonds, identifying the projected Employers' Contributions for each Bond Year through the final Maturity of all outstanding Bonds proposed to be issued, and the assumptions used in such projections, it being agreed that the report, dated January 11, 2008, of Global Insight, Inc. delivered in connection with the issuance of the Series A Bonds (the "Global Insight Report") shall satisfy the obligations of the System under this paragraph (i) if delivered to the Fiscal Agent in connection with the delivery of any additional Bonds or Parity Obligations hereunder prior to January 1, 2009;

(ii) a Supplemental Resolution adopted pursuant to requirements of Section 202; and

(iii) a certificate of an Authorized Officer of the System setting forth for each Bond Year listed in the report in clause (i) above the Accrued Payment Obligation for the additional Bonds proposed to be issued and all Bonds and Parity Obligations to be Outstanding immediately after the issuance of said additional Bonds. The certificate shall state that (a) the System has reviewed the Consultant's Report and believes that the assumptions used are reasonable (provided that this requirement should not apply to the Global Insight Report mentioned in paragraph (i) above prior to January 1, 2009 when used during 2008); and (b) (I) in the case of Senior Bonds, for each Bond Year, the projected Employers' Contributions for such year are equal to or greater than 140% of the corresponding Accrued Payment Obligation for the additional Senior Bonds proposed to be issued and the Senior Bonds and corresponding Parity Obligations outstanding immediately after the issuance of such additional Bonds; or (II) in the case of Subordinated Bonds, for each Bond Year, the projected Employers' Contributions for such year are equal to or greater than 125% of the corresponding Accrued Payment Obligation for the additional Subordinated Bonds proposed to be issued and the Senior Bonds, Subordinated Bonds and corresponding Parity Obligations outstanding immediately after the issuance of such additional Bonds.

2. Refunding Bonds issued pursuant to Section 204 of this Resolution which generate savings in every Bond Year are exempt from complying with the coverage tests required by (iii) above.

### SECTION 709. General.

1. The System shall do and perform or cause to be done and performed all acts and things required to be done or performed by or on behalf of the System under the provisions of the Act and this Resolution. Specifically, the System shall do and perform or cause to be done and performed all acts and things required to be done or performed by or on behalf of the System with regards to the collection of the Employers' Contributions as provided in the Act.

2. The System shall oppose any attempt by the Legislature of the Commonwealth to reduce the Employers' Contribution Rate or to make any other change in the Act or any other relevant legislation that would have a material adverse effect on Bondholders. Such opposition shall include delivering written position papers to the Legislature of the Commonwealth, appearing before Legislative committees, and contacting individual legislators and other government officials to make legislators and other government officials aware that such reductions in the Employers' Contribution Rate or other changes may adversely affect the ability of the System to comply with its obligations and may ultimately have an adverse effect on the credit of the Commonwealth.

3. Upon the date of authentication and delivery of any of the Bonds, all conditions, acts and things required by law and this Resolution to exist, to have happened and to have been performed precedent to and in the issuance of such Bonds shall exist, shall have happened and shall have been performed and the issue of such Bonds, together with all other indebtedness of the System, shall be within every debt and other

limit prescribed by the laws of the Commonwealth.

### ARTICLE VIII CONCERNING THE FISCAL AGENT

SECTION 801. Fiscal Agent Appointment and Acceptance of Duties. The Bank of New York is hereby appointed as Fiscal Agent under this Resolution. The Fiscal Agent shall signify its acceptance of the duties and obligations imposed upon it by this Resolution by executing the certificate of authentication endorsed upon the Bonds, and by executing such certificate upon any Bond the Fiscal Agent shall be deemed to have accepted such duties and obligations not only with respect to the Bond so authenticated, but with respect to all Bonds thereafter to be issued, but only, however, upon the terms and conditions set forth in this Resolution.

SECTION 802. Responsibilities of Fiscal Agent. The Fiscal Agent undertakes to perform such duties and only such duties as are specifically set forth in this Resolution, and no implied covenants or obligations shall be read into this Resolution against the Fiscal Agent. The recitals of fact herein and in the Bonds contained shall be taken as the statements of the System and the Fiscal Agent assumes no responsibility for the correctness of the same. The Fiscal Agent makes no representations as to the validity or sufficiency of this Resolution or any Supplemental Resolution or of any Bonds issued thereunder or as to the security afforded by this Resolution or any Supplemental Resolution, and the Fiscal Agent shall incur no liability in respect thereof. The Fiscal Agent makes no representations as to the value, condition or sufficiency of any assets pledged or assigned as security for the Bonds, the right, title or interest of the System therein, or the security provided thereby or by this Resolution. The Fiscal Agent shall, however, be responsible for its representation contained in its certificate of authentication on the Bonds. The Fiscal Agent shall be under no responsibility or duty with respect to the authentication and delivery of the Bonds for value or the application of the proceeds thereof or the application of any moneys paid to the System. The Fiscal Agent shall not be responsible for the validity, perfection, priority or enforceability of the pledge and security interest in the Pledged Property created or intended to be created by this Resolution, whether or not impaired by operation of law. No provision of this Resolution shall be deemed to impose any duty or obligation on the Fiscal Agent to perform any act or acts, receive or obtain any interest in property or exercise any interest in property, or exercise any right, power, duty or obligation conferred or imposed on it in any jurisdiction in which it shall be illegal, or in which the Fiscal Agent shall be unqualified or incompetent in accordance with applicable law, to perform any such act or acts, to receive or obtain any such interest in property or to exercise any such right, power, duty or obligation. The Fiscal Agent shall be under no obligation or duty to perform any act which would involve it in expense or liability or to institute or defend any suit in respect hereof, or to advance any of its own moneys, unless provided with security and indemnity satisfactory to it. The Fiscal Agent shall be under no obligation to exercise any of the rights or powers vested in it by this Resolution at the request or direction of any of the Owners pursuant to this Resolution, unless such Owners shall have offered to the Fiscal Agent security or indemnity satisfactory to the Fiscal Agent against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction. The permissive right of the Fiscal Agent to take actions enumerated in this Resolution shall not be construed as a duty. The Fiscal Agent shall not be liable in connection with the performance of its duties under this Resolution except for its own gross negligence or willful misconduct. The Fiscal Agent shall not be liable for any error of judgment made in good faith by an Authorized Officer of the Fiscal Agent, unless it shall be proved that the Fiscal Agent was grossly negligent in ascertaining the pertinent facts. The Fiscal Agent shall not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the Owners of a

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majority in principal amount of the Outstanding Bonds relating to the time, method and place of conducting any proceeding for any remedy available to the Fiscal Agent or exercising any trust or power conferred upon the Fiscal Agent under this Resolution. The Fiscal Agent shall not be liable for any action taken, suffered, or omitted to be taken by it in good faith and believed by it to be authorized or within the discretion or rights or powers conferred upon it by this Resolution. Anything in this Resolution notwithstanding, in no event shall the Fiscal Agent be liable for special, indirect, punitive or consequential loss or damage of any kind whatsoever (including but not limited to loss of profit), even if the Fiscal Agent has been advised as to the likelihood of such loss or damage and regardless of the form of action. Whether or not therein expressly so provided, every provision of this Resolution relating to the conduct or affecting the liability of or affording protection to the Fiscal Agent shall be subject to the provisions of this Article VIII.

SECTION 803. Evidence on Which Fiscal Agent May Act.

1. The Fiscal Agent conclusively rely and shall be fully protected in acting or refraining from acting upon any notice, resolution, request, consent, order, direction, certificate, report, opinion, bond, or other paper or document believed by it to be genuine, and to have been signed or presented by the proper party or parties. The Fiscal Agent may consult with counsel, who may or may not be of counsel to the System, and the opinion or advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken or omitted to be taken or suffered by it under this Resolution in good faith and in reliance thereon; provided, however, that such opinion or advice of counsel shall not relieve the Fiscal Agent from obtaining an Opinion of Counsel when and if required under this Resolution.

2. Whenever the Fiscal Agent shall deem it necessary or desirable that a matter be proved or established prior to taking or omitting to take or suffering any action under this Resolution, such matter (unless other evidence in respect thereof be therein specifically prescribed) may be deemed to be conclusively proved and established by a certificate of an Authorized Officer of the System, and such certificate shall be full warrant and protection for any action taken or omitted to be taken or suffered, in the absence of bad faith, under the provisions of this Resolution in reliance thereon. The Fiscal Agent shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of indebtedness or other paper or document.

3. Except as otherwise expressly provided in this Resolution, any request, order, notice or other direction required or permitted to be furnished pursuant to any provision thereof by the System to the Fiscal Agent shall be sufficiently evidenced if executed in the name of the System by an Authorized Officer of the System.

SECTION 804. Compensation and Indemnification. The System shall pay to the Fiscal Agent from time to time reasonable compensation for all services rendered under this Resolution (which compensation shall not be limited by any provision of law in regard to the compensation of a fiscal agent or trustee of an express trust), and also all reasonable expenses, charges, counsel fees and other disbursements, including those of its attorneys, agents, and employees, incurred in and about the performance of their powers and duties under this Resolution. The System further agrees to indemnify and save the Fiscal Agent harmless against any loss, liability or expenses including taxes (other than taxes based upon, measured by or determined by the income of the Fiscal Agent), arising out of or in connection with the acceptance or administration of the trust or *trusts hereunder*,

including the costs and expenses of defending itself against any claim (whether asserted by the System or any Bondowner or any other Person) or liability in connection with the exercise or performance of any of its powers or duties hereunder, or in connection with enforcing the provisions of this Section 804, except to the extent that such loss, damage, claim, liability or expense is due to its own gross negligence or willful misconduct. In addition to, but without prejudice to its other rights under this Resolution, when the Fiscal Agent incurs expenses or renders services in connection with a bankruptcy or similar event, the expenses (including the reasonable charges and expenses of its counsel) and the compensation for the services are intended to constitute expenses of administration under any applicable federal or state bankruptcy, insolvency or other similar law. Agent" for purposes of this Section 804 shall include any predecessor Fiscal Agent; provided, however, that the negligence, willful misconduct or bad faith of any Fiscal Agent hereunder shall not affect the rights of any other Fiscal Agent hereunder. The obligations of the System and the lien provided for under this Section 804 shall survive the satisfaction and discharge of the Bonds, the termination for any reason of this Resolution or the earlier resignation or removal of the Fiscal Agent. The Fiscal Agent shall not be required to expend any of its own funds in the execution of its duties pursuant to the provisions of this Resolution. The Fiscal Agent shall have a lien prior to that of the Bondowners and other Beneficiaries therefor on any and all funds at any time held by it under this Resolution.

SECTION 805. Certain Permitted Acts. Fiscal Agent may become the owner of any Bonds, with the same rights it would have if it were not the Fiscal Agent. To the extent permitted by law, the Fiscal Agent may act as depositary for, and permit any of its officers or directors to act as a member of, or in any other capacity with respect to, any committee formed to protect the rights of Bondowners or to effect or aid in any reorganization growing out of the enforcement of the Bonds or this Resolution, whether or not any such committee shall represent the Owners of a majority in principal amount of the Bonds then Outstanding. The Fiscal Agent may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents or attorneys and the Fiscal Agent shall not be responsible for any misconduct or negligence on the part of any agent or attorney appointed with due care by it hereunder. The rights, privileges, protections, immunities and benefits given to the Fiscal Agent, including, without limitation, its right to be indemnified, are extended to, and shall be enforceable by, the Fiscal Agent in each of its capacities hereunder, and each agent, custodian and other Person employed to act hereunder.

SECTION 806. Resignation of Fiscal Agent. The Fiscal Agent may at any time resign and be discharged of the duties and obligations created by this Resolution by giving not less than forty-five (45) days' written notice to the System (which shall give prompt written notice to each Beneficiary) and to the Bondowners (mailed, postage prepaid), specifying the date when such resignation shall take effect, and such resignation shall take effect upon the day specified in such notice unless (i) no successor shall have been appointed by such date in which case such resignation shall become effective upon the appointment of a successor, or (ii) previously a successor shall have been appointed by the System or the Bondowners as provided in Section 808, in which event such resignation shall take effect immediately on the appointment of such successor. The Fiscal Agent shall also mail a copy of the notice required to be given by this Section, postage prepaid, to the Owners of the Bonds, at their last addresses appearing on the registry books.

SECTION 807. Removal of Fiscal Agent. The Fiscal Agent may be removed at any time, with or without cause, by an instrument or concurrent instruments in writing, delivered to the Fiscal Agent, and signed by the Owners of a majority in principal amount of the Bonds then Outstanding or their

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attorneys-in-fact duly authorized, excluding any Bonds held by or for the account of the System, or, so long as no Event of Default or event which with the giving of notice or the passage of time would constitute an Event of Default has occurred and is continuing, by an instrument in writing delivered to the Fiscal Agent and signed by an Authorized Officer of the System; provided, however, that in each case that a successor Fiscal Agent shall be simultaneously appointed with the filing of such instrument.

SECTION 808. Appointment of Successor Fiscal Agent.

1. In case at any time the Fiscal Agent shall resign or shall be removed or shall become incapable of acting, or shall be adjudged bankrupt or insolvent, or if a receiver, liquidator or conservator of the Fiscal Agent, or of its property, shall be appointed, or if any public officer shall take charge or control of the Fiscal Agent, or of its property or affairs, a successor may be appointed by the Owners of a majority in principal amount of the Bonds then Outstanding, excluding any Bonds held by or for the account of the System, by an instrument or concurrent instruments in writing signed and acknowledged by such Bondowners or by their attorneys-in-fact duly authorized and delivered to such successor Fiscal Agent, notification thereof being given to the System and the predecessor Fiscal Agent; provided, nevertheless, that unless a successor Fiscal Agent shall have been appointed by the Bondowners as aforesaid, the System by a duly executed written instrument signed by an Authorized Officer of the System shall forthwith appoint a Fiscal Agent to fill such vacancy until a successor Fiscal Agent shall be appointed by the Bondowners as authorized in this Section. The Fiscal Agent shall mail a copy of the notice of any such appointment, postage prepaid, to the Owners of any Bonds, at their last addresses appearing on the registry books. Any successor Fiscal Agent appointed by the System shall, immediately and without further act, be superseded by a Fiscal Agent appointed by the Bondowners.

2. If in a proper case no appointment of a successor Fiscal Agent shall be made pursuant to the foregoing provisions of this Section within thirty (30) days after the Fiscal Agent shall have given to the System written notice as provided in Section 806 or after a vacancy in the office of the Fiscal Agent shall have occurred by reason of its inability to act or its removal under Section 807, the Fiscal Agent or the Owner of any Bond may apply to any court of competent jurisdiction to appoint a successor Fiscal Agent. Said court may thereupon, after such notice, if any, as such court may deem proper, appoint a successor Fiscal Agent.

3. Any Fiscal Agent appointed under the provisions of this Section in succession to the Fiscal Agent shall be a bank or trust company organized under the laws of a state of the United States of America or of the Commonwealth or a national banking association, and having a capital and surplus aggregating at least \$50,000,000 (or whose obligations hereunder are guaranteed by a bank or trust company duly authorized to exercise corporate trust powers and subject to examination by federal or state authority, of good standing, and having at the time of the appointment of such Fiscal Agent, a combined capital and surplus of at least such amount), if there be such a bank or trust company or national banking association willing and able to accept the office on reasonable and customary terms and authorized by law to perform all the duties imposed upon it by this Resolution.

SECTION 809. Transfer of Rights and Property to Successor Fiscal Agent. Any successor Fiscal Agent appointed under this Resolution shall execute, acknowledge and deliver to its predecessor Fiscal Agent, and also to the System, an instrument accepting such appointment, and thereupon such successor Fiscal Agent, without any further act, deed or conveyance, shall become fully vested with all moneys, estates, properties, rights, powers,

duties and obligations of such predecessor Fiscal Agent, with like effect as if originally named as Fiscal Agent; but the Fiscal Agent ceasing to act shall nevertheless, on the written request of the System, or of the successor Fiscal Agent, upon payment of its charges and all other amounts payable to it hereunder, execute, acknowledge and deliver such instruments of conveyance and further assurance and do such other things as may reasonably be required for more fully and certainly vesting and confirming in such successor Fiscal Agent all the right, title and interest of the predecessor Fiscal Agent in and to any property held by it under this Resolution, and shall pay over, assign and deliver to the successor Fiscal Agent any money or other property subject to the trusts and conditions herein set forth but subject to Section 804. Should any deed, conveyance or instrument in writing from the System be required by such successor Fiscal Agent for more fully and certainly vesting in and confirming to such successor Fiscal Agent any such estates, rights, powers and duties, any and all such deeds, conveyances and instruments in writing shall, on request, and so far as may be authorized by law, be executed, acknowledged and delivered by the System.

SECTION 810. Merger or Consolidation. Any company into which the Fiscal Agent may be merged or converted or with which it may be consolidated or any company resulting from any merger, conversion or consolidation to which it shall be a party or any company to which the Fiscal Agent may sell or transfer all or substantially all of its corporate trust business, provided such company shall be a bank or trust company organized under the laws of any state of the United States or the Commonwealth or a national banking association, and shall be authorized by law to perform all the duties imposed upon it by this Resolution, shall be the successor to the Fiscal Agent without the execution or filing of any paper or the performance of any further act.

SECTION 811. Adoption of Authentication. In case any of the Bonds contemplated to be issued under this Resolution shall have been authenticated but not delivered, any successor Fiscal Agent may adopt the certificate of authentication of any predecessor Fiscal Agent so authenticating such Bonds and deliver such Bonds so authenticated, and in case any of the said Bonds shall not have been authenticated, any successor Fiscal Agent may authenticate such Bonds in the name of the successor Fiscal Agent; and in all such cases such certificate shall have the full force which it is anywhere in said Bonds or in this Resolution provided that the certificate of authentication of the Fiscal Agent shall have.

SECTION 812. Accounting by Fiscal Agent; Nonpetition Covenant. The Fiscal Agent shall, upon receipt of a written request therefor from the System, provide to the System an accounting of the amounts on deposit in all Funds, Accounts and Subaccounts maintained under this Resolution as of the date of such accounting. Notwithstanding any prior termination of this Resolution, the Fiscal Agent shall not, prior to the date which is one year and one day after the termination of this Resolution, acquiesce, petition or otherwise invoke or cause the System to invoke the process of any court or government authority for the purpose of commencing or sustaining a case against the System under any Federal or state bankruptcy, insolvency or similar law or appointing a receiver, liquidator, assignee, trustee, custodian, sequestrator or other similar official of the System or any substantial part of its property, or ordering the winding up or liquidation of the affairs of the System.

SECTION 813. Appointment of Co-Fiscal Agent.

(a) Notwithstanding any other provisions of this Resolution, at any time for the purpose of meeting any legal requirement of any jurisdiction (including any jurisdiction in which any part of the Pledged Property may at the time be located), the Fiscal Agent shall have the power and may execute and deliver all instruments necessary to appoint one or more Persons to act as a

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co-fiscal agent or co-fiscal agents, or separate fiscal agent or separate fiscal agents (including with respect to all or any part of the Pledged Property), and to vest in such Person or Persons, in such capacity and for the benefit of the Bondowners, subject to the other provisions of this Section, such powers, duties, obligations, rights and trusts as the Fiscal Agent may consider necessary or desirable (including title to the Pledged Property or any part thereof). Each co-fiscal agent or separate fiscal agent hereunder shall be required to have a combined capital and surplus (computed in accordance with Section 310(a)(2) of the Trust Resolution Act of 1939, as amended) of at least \$50,000,000 and the Fiscal Agent shall, at the expense of the System, provide prompt notice to holders of the appointment of any co-fiscal agent or separate fiscal agent.

- (b) Every separate fiscal agent and co-fiscal agent shall, to the extent permitted by law, be appointed and act subject to the following provisions and conditions:
  - all rights, powers, duties and obligations conferred or imposed upon the Fiscal Agent shall be conferred or imposed upon and exercised or performed by the Fiscal Agent and such separate fiscal agent or co-fiscal agent jointly (it being understood that such separate fiscal agent or co-fiscal agent is not authorized to act separately without the Fiscal Agent joining in such act), except to the extent that under any law of any jurisdiction in which any particular act or acts are to be performed the Fiscal Agent shall be incompetent or unqualified to perform such act or acts, in which event such rights, powers, duties and obligations (including the holding of the Pledged Property or any portion thereof in any such jurisdiction ) shall be exercised and performed singly by such separate trustee or co-trustee, but solely at the direction of the Fiscal Agent;
  - (ii) no fiscal agent hereunder shall be personally liable by reason of any act or omission of any other fiscal agent hereunder; and
  - (iii) the Fiscal Agent may at any time accept the resignation of or remove any separate fiscal agent or co-fiscal agent.
- (c) Any notice, request or other writing given to the Fiscal Agent shall be deemed to have been given to each of the then separate fiscal agent and co-fiscal agent, as effectively as if given to each of them. Every instrument appointing any separate fiscal agent or co-fiscal agent shall refer to this Resolution and the conditions of this Section 813. Each separate fiscal agent and co-fiscal agent, upon its acceptance of the trusts conferred, shall be vested with the estates or property specified in its instrument of appointment, either jointly with the Fiscal Agent or separately, as may be provided therein, subject to all the provisions of this Resolution, specifically including every provision of this Resolution relating to the conduct of, affecting the liability of, or affording protection or rights (including the right to compensation, reimbursement and indemnification hereunder) to. the Fiscal Agent. Every such instrument shall be filed with the Fiscal Agent.
- (d) Any separate fiscal agent or cofiscal agent may at any time constitute the Fiscal Agent its agent or attorney-in-fact with full power and authority, to the extent not

prohibited by law, to do any lawful act under or in respect of this Resolution on its behalf and in its name. If any separate properties, rights, remedies and trusts shall vest in and be exercised by the Fiscal Agent, to the extent permitted by law, without appointment of a new or successor fiscal agent.

### ARTICLE IX SUPPLEMENTAL RESOLUTIONS

SECTION 901. Supplemental Resolutions Effective upon Filing with the Fiscal Agent. For any one or more of the following purposes and at any time or from time to time, the System may adopt a Supplemental Resolution, which, upon the filing with the Fiscal Agent of a copy thereof certified by an Authorized Officer of the System, and without the need to obtain the consent of any Bondholder, shall be fully effective in accordance with its terms:

- (i) to close this Resolution against, or provide limitations and restrictions in addition to the limitations and restrictions contained in this Resolution on, the authentication and delivery of the Bonds or the issuance of other evidences of indebtedness:
- (ii) to add to the covenants and agreements of the System in this Resolution, other covenants and agreements to be observed by the System which are not contrary to or inconsistent with this Resolution as theretofore in effect;
- (iii) to add to the limitations and restrictions in this Resolution, other limitations and restrictions to be observed by the System which are not contrary to or inconsistent with this Resolution as theretofore in effect;
- (iv) to surrender any right, power or privilege reserved to or conferred upon the System by this Resolution to the extent such surrender is for the benefit of the Owners of the Bonds;
- (v) to authorize Bonds of a Series and, in connection therewith, specify and determine the matters and things referred to in Section 202, and also any other matters and things relative to such Bonds which are not contrary to or inconsistent with this Resolution as theretofore in effect, or to amend, modify or rescind any such authorization, specification or determination at any time prior to the first authentication and delivery of such Bonds;
- (vi) to confirm, as further assurance, any pledge and assignment under, and the subjection to any lien, assignment or pledge created or to be created by, this Resolution, of the Pledged Property or of any other moneys, securities, funds or accounts:
- (vii) to modify any of the provisions of this Resolution as may be necessary or desirable to provide for the issuance of Bonds in book entry form pursuant to Section 301(5);
- (viii) to cure any ambiguity, defect or inconsistent provision in this Resolution;
- (ix) if such Supplemental Resolution authorizes Bonds of a Series that are Adjustable Rate Bonds, Capital Appreciation Bonds, Convertible Capital Appreciation Bonds or Bonds hedged or to be hedged by a Qualified Hedge, or authorizes a Qualified Hedge on Bonds previously issued, to add provisions specifying the method of calculating the Accrued Payment Obligation with respect to such Bonds, for purposes of the Debt Service Reserve Requirement and the additional Bonds

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tests of Sections 204 and 708;

- (x) to provide such provisions with respect to Subordinated Bonds as are necessary and desirable, provided, that no such provisions shall adversely affect the payment priorities under this Resolution of any Bonds then Outstanding;
- (xi) to provide for a security interest on the Pledged Property for the payment and as security for Credit Facilities, Liquidity Facilities and Qualified Hedges as permitted by Section 501(1).
  - (xii) as permitted by Section 1005;
- (xiii) to insert such provisions clarifying matters or questions arising under this Resolution as are necessary or desirable and are not contrary to or inconsistent with this Resolution as theretofore in effect; or
- (xiv) to modify any of the provisions of this Resolution or any previously adopted Supplemental Resolution in any respect whatsoever, *provided* that (i) such modification shall be, and be expressed to be, effective only after all Bonds of any Series Outstanding at the date of the adoption of such Supplemental Resolution shall cease to be Outstanding and (ii) such Supplemental Resolution shall be specifically referred to in the text of all Bonds of any Series authenticated and delivered after the date of the adoption of such Supplemental Resolution and of Bonds issued in exchange therefor or in place thereof.
- SECTION 902. Supplemental Resolutions Effective with Consent of Bondowners. At any time or from time to time, the System may adopt a Supplemental Resolution subject to consent by Bondowners in accordance with and subject to the provisions of Article X, which Supplemental Resolution, upon the delivery to the Fiscal Agent of a copy thereof certified by an Authorized Officer of the System, and upon compliance with the provisions of Article X, shall become fully effective in accordance with its terms as provided in Article X.

SECTION 903. Reserved.

SECTION 904. General Provisions.

- 1. This Resolution shall not be modified or amended in any respect except as provided in and in accordance with and subject to the provisions of this Article IX and Article X. Nothing contained in this Article IX or Article X shall affect or limit the right or obligation of the System to adopt, make, execute, acknowledge or deliver any resolution, act or other instrument pursuant to the provisions of Section 704 or the right or obligation of the System to execute and deliver to the Fiscal Agent any instrument which elsewhere in this Resolution it is provided shall be delivered to the Fiscal Agent.
- 2. Any Supplemental Resolution referred to and permitted or authorized by Section 901 may be adopted by the System without the consent of any of the Bondowners, but shall become effective only on the conditions, to the extent and at the time provided in said Section. The copy of every Supplemental Resolution when delivered to the Fiscal Agent shall be accompanied by an Opinion of Counsel stating that such Supplemental Resolution has been duly and lawfully adopted in accordance with the provisions of this Resolution, is authorized or permitted by this Resolution, and is valid and binding upon the System and enforceable in accordance with its terms. After any Supplemental Resolution becomes effective under this Article, the System shall mail to the Owners a notice briefly describing such Supplemental Resolution; provided, however, the failure to give

such notice, or any defect therein, shall not impair or affect the validity of such Supplemental Resolution under this Article.

- 3. The Fiscal Agent is hereby authorized to accept the delivery of a certified copy of any Supplemental Resolution referred to and permitted or authorized by Sections 901 or 902 and to make all further agreements and stipulations which may be therein contained, and the Fiscal Agent, in taking such action in good faith, shall be fully protected in relying on an Opinion of Counsel that such Supplemental Resolution is authorized or permitted by the provisions of this Resolution.
- 4. No Supplemental Resolution shall change or modify any of the rights or obligations of the Fiscal Agent without its written assent thereto.

### ARTICLE X AMENDMENTS

SECTION 1001. Mailing and Publication.

- 1. Any provision in this Article for the mailing of a notice or other paper to Bondowners shall be fully complied with if it is mailed postage prepaid only (i) to each Owner of Bonds then Outstanding at his address, if any, appearing upon the registry books of the System, and (ii) to the Fiscal Agent.
- 2. In case by reason of the suspension of regular mail service or by reason of any other cause it shall be impracticable to give such notice by mail as required by this Resolution, then such notification as shall be made with the approval of the Fiscal Agent shall constitute a sufficient notification for every purpose hereunder.

SECTION 1002. Powers of Amendment. modification or amendment of this Resolution and of the rights and obligations of the System and of the Owners of the Bonds may be made by a Supplemental Resolution, with the written consent, given as provided in Section 1003, (i) of the Owners of at least a majority in principal amount of the Bonds Outstanding at the time such consent is given, and (ii) in case less than all of the several Series of Bonds then Outstanding are affected by the modification or amendment, of the Owners of at least a majority in principal amount of the Bonds of each Series so affected and Outstanding at the time such consent is given; provided, however, that if such modification or amendment will, by its terms, not take effect so long as any Bonds of any specified like Series and maturity remain Outstanding, the consent of the Owners of such Bonds shall not be required and such Bonds shall not be deemed to be Outstanding for the purpose of any calculation of Outstanding Bonds under this Section. No such modification or amendment shall permit a change in the terms of redemption or maturity of the principal (or Accreted Amount, if applicable) of any Outstanding Bond or of any installment of interest thereon or a reduction in the principal amount (or Accreted Amount, if applicable) or the Redemption Price thereof or in the rate of interest thereon without the consent of each Bondowner affected thereby, or shall reduce the percentage of the aggregate principal amount (or Accreted Amount, if applicable) of Bonds or otherwise affect classes of Bonds the consent of the Owners of which is required to effect any such modification or amendment without the consent of all Bondowners, or shall change or modify any of the rights or obligations of the Fiscal Agent without its written assent thereto, or shall change or modify any of the rights of the providers of Qualified Hedges, Credit Facilities or Liquidity Facilities regarding source of and security for payments due to such Persons, or amount and timing of payments due, without the prior written consent of such Persons. For the purposes of this Section, a Series shall be deemed to be affected by a modification or amendment of this Resolution if the same adversely affects or diminishes the

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rights of the Owners of Bonds of such Series. The Fiscal Agent may, but shall not be obligated to, determine whether or not in accordance with the foregoing powers of amendment, Bonds of any particular Series or maturity would be affected by any modification or amendment of this Resolution, and any such determination if reasonable and in good faith shall be binding and conclusive on the System and all Owners of Bonds.

SECTION 1003. Consent of Bondowners. System may at any time adopt a Supplemental Resolution making a modification or amendment permitted by the provisions of Section 902, to take effect when and as provided in this Section. A copy of such Supplemental Resolution (or brief summary thereof or reference thereto in form approved by the Fiscal Agent) together with a request to Bondowners for their consent thereto in form satisfactory to the Fiscal Agent, shall be mailed by the System to all affected Bondowners. Such Supplemental Resolution shall not be effective unless and until (i) there shall have been delivered to the Fiscal Agent (a) the written consents of Owners of the percentage of the aggregate principal amount of Outstanding Bonds specified in Section 1002, and (b) an Opinion of Counsel stating that such Supplemental Resolution has been duly and lawfully adopted and filed by the System in accordance with the provisions of this Resolution, is authorized or permitted by this Resolution, and is valid and binding upon the System and enforceable in accordance with its terms, and (ii) notice shall have been given as hereinafter in this Section provided. Ownership of Bonds shall be conclusively presumed by the registration books of the System. Any such consent shall be binding upon the Owner of the Bonds giving such consent and, anything in Section 1102 to the contrary notwithstanding, upon any subsequent Owner of such Bonds and of any Bonds issued upon registration of transfer thereof or in exchange therefor (whether or not such subsequent Owner thereof has notice thereof), unless such consent is revoked in writing by the Owner of such Bonds giving such consent or a subsequent Owner thereof by filing with the Fiscal Agent, prior to the time when the written statement of the Fiscal Agent hereinafter in this Section provided for is filed. At any time after the Owners of the required percentages of Bonds shall have filed their consents to the Supplemental Resolution, the Fiscal Agent shall make and file with the System a written statement that the Owners of such required percentage of the aggregate principal amount of Bonds have filed such consents. Such written statement shall be conclusive that such consents have been so filed. At any time thereafter, notice, stating in substance that the Supplemental Resolution (which may be referred to as a Supplemental Resolution adopted by the System on a stated date, a copy of which is on file with the Fiscal Agent) has been consented to by the Owners of the required percentage of the aggregate principal amount of Bonds and will be effective as provided in this Section, shall be given Bondowners by the System by mailing such notice to Bondowners. The System shall file with the Fiscal Agent proof of the mailing of such notice. A record, consisting of the papers required or permitted by this Section 1003 to be delivered to the Fiscal Agent, shall be proof of the matters therein stated.

SECTION 1004. Modifications by Unanimous Consent. The terms and provisions of this Resolution and the rights and obligations of the System and of the Owners of the Bonds may be modified or amended in any respect upon the adoption and filing by the System with the Fiscal Agent of a Supplemental Resolution and the consent of the Owners of all of the Bonds then Outstanding, such consent to be given as provided in Section 1003 except that no notice to Bondowners shall be required.

SECTION 1005. Modification Before Bonds Outstanding. Prior to the issuance and delivery of the first Series of Bonds under this Resolution, the terms and conditions of this Resolution and the rights and obligations of the System and of the Owners of the Bonds may be modified or amended in any respect without the consent of any person, upon the adoption of a

Supplemental Resolution and the delivery to the Fiscal Agent of a copy thereof certified by an Authorized Officer of the System.

SECTION 1006. Exclusion of Bonds. Bonds owned or held by or for the account of the System shall not be deemed Outstanding for the purpose of consent or other action or any calculation of Outstanding Bonds provided for in this Article, and the System shall not be entitled with respect to such bonds to give any consent or take any other action provided for in this Article. At the time of any consent or other action taken under this Article, the System shall furnish the Fiscal Agent a certificate of an Authorized Officer, upon which the Fiscal Agent may rely, describing all Bonds so to be excluded.

SECTION 1007. Notation on Bonds. authenticated and delivered after the effective date of any action taken as provided in Article IX or this Article may, and, if the Fiscal Agent so determines, shall, bear a notation by endorsement or otherwise in form approved by the System and the Fiscal Agent as to such action, and in that case upon demand of the Owner of any Bond Outstanding at such effective date and presentation of his Bond for the purpose at the Corporate Trust Office of the Fiscal Agent, suitable notation shall be made on such Bond by the Fiscal Agent as to any such action. If the System or the Fiscal Agent shall so determine, new Bonds so modified to conform to such action shall be prepared, authenticated and delivered, and, upon demand of the Owner of any Bond then Outstanding, shall be exchanged, without cost to such Bondowners for Bonds of the same Series and maturity and then Outstanding, upon surrender of such Bonds.

### ARTICLE XI DEFAULTS AND REMEDIES

SECTION 1101. Events of Default.

Each of the following events shall constitute an Event of Default under this Resolution:

(i) There shall occur a default in the payment of principal or Redemption Price of or interest on any Bond or payments due to any Parity Obligation or any Subordinate Obligation related thereto in the Currency in which such Bond, Parity Obligation or Subordinate Obligation is payable, after the same shall have become due, whether at maturity or upon call for redemption or otherwise.

There shall occur a (ii) failure to observe, or a refusal to comply with, the terms of this Resolution or the Bonds, other than a failure or refusal constituting an event specified in paragraph (i) of this paragraph; provided, however, that with respect to any failure to observe or refusal to comply with the covenants and agreements set forth in this Resolution, such failure or refusal shall have continued for a period of thirty (30) days after written notice, specifying such failure and requesting that it be remedied, is given to the System by the Fiscal Agent or any Beneficiary. If prior to the expiration of the abovementioned thirty (30) day period, the System shall request in writing an extension of time and the System shall certify in such request that the failure stated in the notice cannot be remedied within such 30-day period, then such thirty (30) day period shall be extended for an additional thirty (30) days if corrective action has been instituted by the System and is being diligently pursued;

provided, that all references in this Article XI to the Owners of Bonds exercising or directing the exercise of default remedies shall refer solely to those Bonds as to which an Event of

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Default has been declared hereunder.

SECTION 1102. Remedies.

1. The Fiscal Agent may, and upon the written request of the Owners of not less than twenty-five per centum (25%) in principal amount of the Outstanding Bonds, shall, proceed to protect and enforce its rights and the rights of the Bondowners by such of the following remedies, as the Fiscal Agent, being advised by counsel shall deem most effectual to protect and enforce such rights subject to the provisions of Sections 201, 803 and 1206:

- (i) by suit, action or proceeding to enforce all rights of the Bondowners, including the right to collect or require the System to collect Revenues adequate to carry out the covenants, agreements and assignments with respect thereto contained in this Resolution and to require the System to carry out any other covenant or agreement with Bondowners and to perform its duties under the Act;
- (ii) by suit upon the Bonds limited, upon recovery thereunder, to the Pledged Property pledged and assigned under this Resolution;
- (iii) by action or suit in equity, to require the System to account as if it were the trustee of an express trust for the Bondowners, for the Pledged Property pledged and assigned under this Resolution as shall be within its control; and
- (iv) by action or suit in equity, to enjoin any acts or things which may be unlawful or in violation of the rights of the Bondowners or the Beneficiaries.
- In the enforcement of any remedy under this Resolution, but subject to Sections 201, 501 and 1206, the Fiscal Agent shall be entitled to sue for, enforce payment on and receive any and all amounts then or during any default becoming, and at any time remaining, due from the System for principal, Redemption Price, interest or otherwise for Bonds under any provision of this Resolution or any Supplemental Resolution or of or on the Bonds, and unpaid, with interest on overdue payments, to the extent permitted by law, at the rate or rates of interest specified in such Bonds, together with any and all costs and expenses of collection and of all proceedings hereunder and under such Bonds, without prejudice to any other right or remedy of the Fiscal Agent or of the Bondowners, and to recover and enforce judgment or decree against the System for any portion of such amounts remaining unpaid, with interest, costs and expenses, in any manner provided by law, the moneys adjudged or decreed to be payable.

SECTION 1103. Priority of Payments After Event of Default.

1. Subject to Section 804 and after making provision for the payment of any reasonable expenses of the Fiscal Agent and its agents and attorneys necessary in the opinion of the Fiscal Agent to protect the interests of the Owners of the Bonds and the other Beneficiaries, and for the payment of the reasonable charges and expenses and liabilities incurred and advances made by the Fiscal Agent and its agents and attorneys in the performance of their duties under this Resolution, in the event that the funds held by the Fiscal Agent shall be insufficient for the payment of interest and principal or Accreted Amount or Redemption Price then due on the Bonds in the Currency or Currencies in which such Bonds are payable, respectively, and

other amounts payable as described in clauses FIRST through FIFTH of this paragraph 1, such funds (excluding funds held for the payment or redemption of particular Bonds which have theretofore become due at maturity or by call for redemption) and any other moneys received or collected by the Fiscal Agent and any moneys or other property distributable in respect of the System's obligations under this Resolution after the occurrence of an Event of Default, shall be applied as follows:

FIRST: to the payment to the Persons entitled thereto of regularly scheduled fees payable under each Ancillary Bond Facility;

SECOND: to the payment to the Persons entitled thereto of all installments of interest on the Senior Bonds and the interest component of Parity Obligations then due, and thereafter, in the order of such installments, and, if the amount available shall not be sufficient to pay in full any installment due on the same date, then to the payment thereof ratably, according to the amounts due on such date, without any discrimination or preference, except as to any difference in the respective rates of interest specified in such Bonds and Parity Obligations, and then to the payment of any interest due and payable after maturity on such Bonds and the interest component of the Parity Obligations, ratably, to the Persons entitled thereto, without any discrimination or preference except as to any difference in the respective rates of interest specified in such Bonds and Parity Obligations;

THIRD: to the payment to the Persons entitled thereto of the unpaid principal or Redemption Price of the Senior Bonds and the unpaid principal component of Parity Obligations, which shall have become due, whether at maturity or by call for redemption, in the order of their due dates and, if the amount available shall not be sufficient to pay in full all such Bonds and the principal component of Parity Obligations due on the same date, then to the payment thereof ratably, according to the amounts of principal or Redemption Price due on such date, without any discrimination or preference;

FOURTH: to the payment to the Persons entitled thereto of all installments of interest on the Subordinated Bonds and the interest component of Parity Obligations then due, and thereafter, in the order of such installments, and, if the amount available shall not be sufficient to pay in full any installment due on the same date, then to the payment thereof ratably, according to the amounts due on such date, without any discrimination or preference, except as to any difference in the respective rates of interest specified in such Bonds and Parity Obligations, and then to the payment of any interest due and payable after maturity on such Bonds and the interest component of Parity Obligations, ratably, to the Persons entitled thereto, without any discrimination or preference except as to any difference in the respective rates of interest specified in such Bonds and Parity Obligations;

FIFTH: to the payment to the Persons entitled thereto of the unpaid principal or Redemption Price of the Subordinated Bonds and the unpaid principal component of Parity Obligations, which shall have become due, whether at maturity or by call for redemption, in the order of their due dates and, if the amount available shall not be sufficient to pay in full all such Bonds and the principal component of Parity Obligations due on the same date, then to the payment thereof ratably, according to the amounts of principal or

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Redemption Price due on such date, without any discrimination or preference;

SIXTH: to the payment to the Persons entitled thereto of amounts reimbursable or payable by the System under each Credit Facility for draws or payments thereunder to pay principal of or interest on Bonds, whether such reimbursements or payments are made to the Credit Facility Provider as a Bondowner, as a subrogee or otherwise; and

SEVENTH: to the payment to the Persons entitled thereto of amounts payable by the System under each Credit Facility, Liquidity Facility and Qualified Hedge not constituting Parity Obligations or payable pursuant to clauses FIRST through SIXTH of this paragraph.

2. The provisions of this Section are in all respects subject to the provisions of Section 702.

Whenever moneys are to be applied by the Fiscal Agent pursuant to this Section, such moneys shall be applied by the Fiscal Agent at such times, and from time to time, as provided above. The deposit of such moneys with the Fiscal Agent, or otherwise setting aside such moneys in trust for the proper purpose, shall constitute proper application by the Fiscal Agent and the Fiscal Agent shall incur no liability whatsoever to the System, to any Bondowner to any Beneficiary or to any other Person for any delay in applying any such moneys, so long as the Fiscal Agent acts without gross negligence or willful misconduct. Whenever the Fiscal Agent shall exercise such discretion in applying such moneys, it shall fix the date (which shall be an interest payment date unless the Fiscal Agent shall deem another date more suitable) upon which such application is to be made and upon such date interest on the amounts of principal (or Accreted Amount, if any) to be paid on such date shall cease to accrue. The Fiscal Agent shall give such notice as it may deem appropriate for the fixing of any such date. The Fiscal Agent shall not be required to make payment to the Owner of any Bond unless such Bond shall be presented to the Fiscal Agent for appropriate endorsement or for cancellation if fully paid.

SECTION 1104. Termination of Proceedings. In case any proceeding taken by the Fiscal Agent on account of any Event of Default has been discontinued or abandoned for any reason, other than payment in full, then in every such case the System, the Fiscal Agent, the Beneficiaries and the Bondowners shall be restored to their former positions and rights hereunder, respectively, and all rights, remedies, powers and duties of the Fiscal Agent shall continue as though no other such proceeding had been taken.

SECTION 1105. Bondowners' Direction Proceedings. Except as otherwise provided in this Resolution, the Owners of a majority in principal amount of the Bonds in order of Class Priority then Outstanding shall have the right, by an instrument or concurrent instruments in writing executed and delivered to the Fiscal Agent, to direct the method of conducting remedial proceedings to be taken by the Fiscal Agent with respect to the Bonds of such Class Priority, provided that such direction shall not be otherwise than in accordance with law or the provisions of this Resolution, and that the Fiscal Agent shall have the right to decline to follow any such direction which in the opinion of the Fiscal Agent would be unjustly prejudicial to Bondowners not parties to such direction or would involve the Fiscal Agent in personal liability.

SECTION 1106. Limitation on Rights of Bondowners.

1 No Owner of any Bond shall have any right to institute any suit, action, mandamus or other proceeding in equity or at law hereunder, or for the protection or enforcement of any right under this Resolution unless such Owner shall have given to the Fiscal Agent written notice of the Event of Default or breach of duty on account of which such suit, action or proceeding is to be taken, and unless the Owners of not less than 25% in principal amount of the Bonds in the order of Class Priority then Outstanding shall have made written request of the Fiscal Agent after the right to exercise such powers or right of action, as the case may be, shall have occurred, and shall have afforded the Fiscal Agent a reasonable opportunity either to proceed to exercise the powers herein granted or granted under the law or to institute such action, suit or proceeding in its name and unless, also, there shall have been offered to the Fiscal Agent reasonable security and indemnity against the costs, expenses (including legal fees and expenses) and liabilities to be incurred therein or thereby, and the Fiscal Agent shall have refused or neglected to comply with such request within a reasonable time; and such notification, request and offer of indemnity are hereby declared in every such case to be conditions precedent to the execution of the powers under this Resolution or for any other remedy provided hereunder or by law. It is understood and intended that no one or more Owners of the Bonds or other Beneficiary hereby secured shall have any right in any manner whatever by his or their action to affect, disturb or prejudice the security of this Resolution, or to enforce any right hereunder or under law with respect to the Bonds, or this Resolution, except in the manner herein provided, and that all proceedings at law or in equity shall be instituted, had and maintained in the manner herein provided and for the benefit of all Owners of the Outstanding Bonds. Nothing contained in this Article shall affect or impair the right of any Bondowner to enforce the payment of the principal (or Accreted Amount, if any) of and interest on such Owner's Bonds or the obligation of the System to pay the principal (or Accreted Amount, if any) of and interest on each Bond issued hereunder to the Owner thereof at the time and place in said Bond expressed.

Anything to the contrary contained in this Section notwithstanding, or any other provision of this Resolution, each Owner of any Bond by such Owner's acceptance thereof, shall be deemed to have agreed that any court in its discretion may require, in any suit for the enforcement of any right or remedy under this Resolution, or in any suit against the Fiscal Agent for any action taken or omitted by it as Fiscal Agent, the filing by any party litigant in such suit of an undertaking to pay the reasonable costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable pre-trial, trial and appellate attorneys' fees, against any party litigant in any such suit, having due regard to the merits and good faith of the claims or defenses made by such party litigant; but the provisions of this paragraph shall not apply to any suit instituted by the Fiscal Agent, to any suit instituted by any Bondowner or group of Bondowners holding at least 25% in principal amount of the Bonds in the order of Class Priority then Outstanding, or to any suit instituted by any Bondowner for the enforcement of the payment of any Bond on or after the respective due date thereof expressed in such Bond.

SECTION 1107. Possession of Bonds by Fiscal Agent Not Required. All rights of action under this Resolution or under any of the Bonds, enforceable by the Fiscal Agent, may be enforced by it without the possession of any of the Bonds or the production thereof on the trial or other proceeding relative thereto, and any such suit, action or proceeding instituted by the Fiscal Agent shall be brought in its name for the benefit of all the Owners of such Bonds, subject to the provisions of this Resolution.

SECTION 1108. Remedies Not Exclusive. No remedy herein conferred upon or reserved to the Fiscal Agent or to the Owners of the Bonds is intended to be exclusive of any other remedy and each and every such remedy shall be cumulative and

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shall be in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or by statute.

SECTION 1109. No Waiver of Default. No delay or omission of the Fiscal Agent, the Beneficiaries or of any Owner of the Bonds to exercise any right or power accruing upon any default shall impair any such right or power or shall be construed to be a waiver of any such default or an acquiescence therein, and every power and remedy given by this Resolution to the Fiscal Agent and the owners of the Bonds or such Beneficiaries, respectively, may be exercised from time to time and as often as may be deemed expedient.

SECTION 1110. Notice of Event of Default. The Fiscal Agent shall give to the Bondowners and the Beneficiaries notice of each Event of Default hereunder known to the Fiscal Agent within ninety (90) days after actual knowledge by an Authorized Officer of the Fiscal Agent of the occurrence thereof, unless such Event of Default shall have been remedied or cured before the giving of such notice. However, except in the case of default in the payment of the principal (or Accreted Amount, if any) or Redemption Price, if any, of or interest on any of the Bonds, the Fiscal Agent shall be protected in withholding such notice if and so long as the board of directors, the executive committee, or a trust committee of directors or responsible officers of the Fiscal Agent in good faith determines that the withholding of such notice is in the interest of the Bondowners and other Beneficiaries. Each such notice of Event of Default shall be given by the Fiscal Agent by mailing written notice thereof: (i) to all Owners of Bonds, as the names and addresses of such Owners appear upon the registry books kept by the Fiscal Agent, (ii) to each of the Rating Agencies, and (iii) to such other Persons as may be required by law.

### ARTICLE XII SUBORDINATION PROVISIONS

SECTION 1201. Subordination.

Subordinated Bonds and (a) Subordinate Obligations shall to the extent provided in this Article be subordinate and subject in right of payment to the prior payment in full of the Senior Bonds and Parity Obligations, and the owner of any Subordinated Bond and Subordinate Obligation, whether upon original issue or upon transfer or assignment thereof, accepts and agrees to be bound by such provision. The Fiscal Agent shall be entitled to all rights set forth in this Article with respect to any Senior Bonds and Parity Obligations at any time held by it, to the same extent as any other Owner of Senior Bonds and Parity Obligations. Notwithstanding anything to the contrary contained in this Article XII, in no event shall any amounts payable to the Fiscal Agent under Section 804 be subject to the provisions of this Article XII.

(b) Upon any payment or distribution of assets of the System upon any dissolution or winding up or total or partial liquidation of the System whether in bankruptcy, insolvency or receivership proceedings, or otherwise,

(1) all Senior Bonds and Parity Obligations shall first be paid or duly provided for to the extent of such payment or distribution before any payment is made upon the indebtedness evidenced by the Subordinated Bonds or Subordinate Obligations;

(2) any payment or distribution of assets of the System of any kind or character, whether in cash, property or securities, to which the owners of the Subordinated Bonds or Subordinate Obligations or the Fiscal Agent (on behalf of the Owners of the Subordinated Bonds or the Subordinate Obligations) would be entitled except for the provisions of this Article XII, including any such payment or

distribution which may be payable or deliverable by reason of the payment of any other indebtedness or other obligations of the System being subordinated to the payment of the Subordinated Bonds and Subordinate Obligations, shall be paid by the liquidating trustee or agent or other person making such payment or distribution, whether a trustee in bankruptcy, a receiver or liquidating trustee or otherwise, directly to the owners of Senior Bonds and Parity Obligations, to the extent necessary to pay or provide for the payment of all Senior Bonds and Parity Obligations in full before any payment is made upon the indebtedness evidenced by the Subordinated Bonds and Subordinate Obligations; and

(3) notwithstanding foregoing, in the event that, upon any such dissolution or winding up or liquidation, any payment or distribution of assets of the System of any kind or character, whether in cash, property or securities, including any such payment or distribution which may be payable or deliverable by reason of the payment of any other indebtedness or other obligations of the System being subordinated to the payment of the Subordinated Bonds and Subordinate Obligations, shall be received by the Fiscal Agent or by the owners of the Subordinated Bonds or Subordinate Obligations (or by the Fiscal Agent on behalf of the Owners of the Subordinated Bonds or the Subordinate Obligations) before all Senior Bonds and Parity Obligations are paid or duly provided for in full, such payment or distribution shall be paid over to the owners of such Senior Bonds and Parity Obligations for application to the payment thereof until such Senior Bonds and Parity Obligations shall have been paid or provision for such payment shall have been made in full.

Upon any payment or distribution of assets of the System referred to in this Section 1201, the Fiscal Agent and the owners of the Subordinated Bonds and Subordinate Obligations shall be entitled to rely upon (i) any order or decree of a court of competent jurisdiction in which such dissolution, winding up, liquidation or reorganization proceedings are pending or (ii) a certificate of the liquidating trustee or agent or other person making any payment or distribution to the Fiscal Agent or the owners of the Subordinated Bonds and Subordinate Obligations for the purpose of ascertaining the persons entitled to participate in such payment or distribution, the owners of Senior Bonds and Parity Obligations and other indebtedness of the System, the amount thereof or payable thereon, the amount or amounts paid or distributed thereon and all other facts pertinent thereto, or to this Article.

(c) (1) In the event that moneys available to pay Bonds shall not be sufficient to pay in full all amounts due on the Bonds, the owners of all Senior Bonds and Parity Obligations then Outstanding shall be entitled to receive payment in full of all principal of and interest on all such obligations then due and payable before the owner of any Subordinated Bond or Subordinate Obligation is entitled to receive any payment from the Pledged Property of principal (and premium, if any) or interest upon such Subordinated Bond and Subordinate Obligation.

(2)The provisions of subsection (b) and (c) are solely for the purpose of defining the relative rights of the owners of Senior Bonds and Parity Obligations on the one hand, and the owners of Subordinated Bonds and Subordinate Obligations on the other hand, and nothing therein shall impair, as between the System and the owners of the Subordinated Bonds and Subordinate Obligations, the obligation of the System, which is unconditional and absolute, to pay to the owners thereof the principal thereof and premium, if any, and interest thereon in accordance with their terms, nor shall anything therein prevent the owners of the Subordinated Bonds and Subordinate Obligations from exercising all remedies otherwise permitted by applicable law or thereunder upon default thereunder, subject to the rights under subsections (b) and (c) of the owners of Senior Bonds and Parity Obligations to receive cash, property or

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securities from the funds pledged to Senior Bonds and Parity Obligations under this Resolution otherwise payable or deliverable to the owners of the Subordinated Bonds and Subordinate Obligations; and insofar as a trustee, fiscal agent or paying agent for such Subordinated Bonds and Subordinate Obligations is concerned, the foregoing provisions shall not prevent the application by such trustee, fiscal agent or paying agent of any moneys deposited with such trustee, fiscal agent or paying agent for the purpose of the payment of or on account of the principal (and premium, if any) and interest on such Subordinated Bonds and Subordinate Obligations if such trustee, fiscal agent or paying agent did not have knowledge at the time of such application that such payment was prohibited by the foregoing provisions.

(d) No owner of Senior Bonds and Parity Obligations shall be prejudiced in this right to enforce subordination of the Subordinated Bonds and Subordinate Obligations by any act or failure to act on the part of the System.

(e) Any issue of Subordinated Bonds and Subordinate Obligations may have such rank or priority with respect to any other issue of Subordinated Bonds and Subordinate Obligations as may be provided herein, in the applicable Supplemental Resolution or other instrument securing such issue of Subordinated Bonds and Subordinate Obligations and may contain such other provisions as are not in conflict with the provisions of this Resolution.

SECTION 1202. Liability of Fiscal Agent and successor Fiscal Agent in respect of Subordination.

With respect to the Owners of Senior Bonds and Parity Obligations, the Fiscal Agent undertakes to perform or to observe only such of its covenants and objectives as are specifically set forth in this Resolution, and no implied covenants or obligations with respect to the owners of Senior Bonds and Parity Obligations shall be read into this Resolution against the Fiscal Agent. Neither the Fiscal Agent nor any successor Fiscal Agent shall be deemed to owe any fiduciary duty to the owners of Subordinated Bonds and Subordinate Obligations and shall not be liable to such owners if it shall mistakenly pay over or transfer to owners of Senior Bonds and Parity Obligations, the System or any other person, moneys to which any owners of Subordinated Bonds and Subordinate Obligations shall be entitled by virtue of this Section 1202 or otherwise; provided, however, that neither the Fiscal Agent nor any successor Fiscal Agent shall be relieved from liability for its own negligent action, its own negligent failure to act, or its own willful misconduct. Notwithstanding any of the provisions of this Section 1202 or any other provision of this Resolution, neither the Fiscal Agent nor any such successor Fiscal Agent shall at any time be charged with knowledge of the existence of any facts that would prohibit the making of any payment of moneys to or by the Fiscal Agent or any such successor Fiscal Agent in respect of Subordinated Bonds and Subordinate Obligations or of any default in the payment of the principal of or premium, if any, or interest on any Subordinated Bonds and Subordinate Obligations, unless and until the Fiscal Agent or such successor Fiscal Agent shall have received written notice thereof from the System or the owners of a majority in principal amount of any class or category of any Subordinated Bonds and Subordinate Obligations or from any fiscal agent or other fiduciary therefor and any financial institution that provides credit or security for any Subordinated Bonds and Subordinate Obligations; and before the receipt of any such written notice, the Fiscal Agent shall be entitled in all respects to assume that no such facts exist; provided, however, that if the Fiscal Agent shall not have received the notice provided for in this Section 1202 at least two Business Days prior to the date upon which by the terms hereof any money may become payable for any purpose (including, without limitation, the payment of the principal of, any premium or interest on any Bond of such series), then, anything herein contained to the contrary notwithstanding, the Fiscal Agent shall have full power and authority to receive such money and to

apply the same to the purposes for which they were received, and shall not be affected by any notice to the contrary that may be received by it within two Business Days prior to such date.

SECTION 1203. When Payment of Subordinated Bonds and Subordinate Obligations Allowed.

Nothing contained in this Resolution or in any Senior Bonds and Parity Obligations or Subordinated Bonds and Subordinate Obligations shall (a) affect the obligation of the System to make, or prevent the System from making, at any time, except as provided in Section 1201, payments of principal of or premium, if any, or interest on Senior Bonds and Parity Obligations or the Subordinated Bonds and Subordinate Obligations, or (b) prevent the application by the Fiscal Agent of any moneys deposited with it hereunder for such purpose to the payment of or on account of the principal of or premium, if any, or interest on Senior Bonds and Parity Obligations or the Subordinated Bonds and Subordinate Obligations, if, at the time of such payment or deposit, the Fiscal Agent did not have at least two Business Days' written notice or actual knowledge of any event prohibiting the making of such deposit by the System.

SECTION 1204. Subrogation of Owners of Subordinated Bonds and Subordinate Obligations.

Subject to the payment in full of all Senior Bonds and Parity Obligations as provided in Section 1201, the owners of the Subordinated Bonds and Subordinate Obligations shall be subrogated to the rights of the owners of Senior Bonds and Parity Obligations to receive payments or distributions of assets of the System made on Senior Bonds and Parity Obligations until the Subordinated Bonds and Subordinate Obligations shall be paid in full, and no payments or distributions to the owners of Senior Bonds and Parity Obligations by the System or by the owners of the Subordinated Bonds and Subordinate Obligations shall, as between the System and the owners of the Subordinated Bonds and Subordinate Obligations, be deemed to be a payment by the System to or on account of the Subordinated Bonds and Subordinate Obligations, it being understood that the provisions of this Article are and are intended solely for the purpose of defining the relative rights of the owners of the Subordinated Bonds and Subordinate Obligations and of Senior Bonds and Parity Obligations and nothing in this Article shall or is intended to, as between the System and the owners of the Subordinated Bonds and Subordinate Obligations, impair the obligation of the System, which is unconditional and absolute, to pay from the sources herein provided to the owners of the Subordinated Bonds and Subordinate Obligations the principal of and premium, if any, and interest on the Subordinated Bonds and Subordinate Obligations in accordance with their terms, nor shall anything in this Article XII prevent the Fiscal Agent or the owner of any Subordinated Bond and Subordinate Obligation from exercising all remedies otherwise permitted by applicable law upon default hereunder, subject to the rights, if any, under this Article XII of the owners of Senior Bonds and Parity Obligations in respect of cash, property or securities of the System received upon the exercise of any such remedy.

SECTION 1205. Treatment of Ancillary Bond Facilities.

Any payment made under any Ancillary Bond Facility, to the owners of the Subordinated Bonds or Subordinate Obligations having the benefit of such Ancillary Bond Facility, by the appropriate obligor thereof shall be retained by such owners for their own account, and no owner of Senior Bonds or Parity Obligations is to have any right with respect to any such payment so made.

As between the obligor whose Ancillary Bond Facility, secures any Subordinated Bond and Subordinate Obligation and the owner of such Subordinated Bonds and Subordinate Obligations, any payment made on such Subordinated Bond and

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Subordinate Obligation by the System which, under the subordination provisions of this Article, is required to be paid over to the owners of the Senior Bonds or Parity Obligations, shall not constitute a payment on such Subordinated Bond or Subordinate Obligation but, instead, shall be treated for all purposes of such Ancillary Bond Facility, as though such payment had not been made by the System. Until the owner of the Subordinated Bond or Subordinate Obligation so guaranteed has received from the System, or from such obligor, moneys which such owner is entitled to retain for its own account, equal in the aggregate to the principal amount of his Subordinated Bond or Subordinate Obligation and any accrued and unpaid interest thereon, such obligor shall remain liable on its Ancillary Bond Facility, and, unless otherwise provided in such Ancillary Bond Facility, shall not be subrogated to any of the rights of the owner of such Subordinated Bond or Subordinate Obligation.

SECTION 1206. Amendments to Senior Bonds and Parity Obligations not Requiring Consent of Owners of Subordinated Bonds and Subordinate Obligations.

Unless otherwise provided therefor in the Senior Bonds and Parity Obligations, the owners of the Senior Bonds and Parity Obligations may extend, renew, modify or amend the terms of Senior Bonds or Parity Obligations or any security therefor and release, sell or exchange such security and otherwise deal freely with the System, all without notice to or consent of the owners of the Subordinated Bonds and Subordinate Obligations and without affecting the liabilities and obligations of the System or the owners of the Subordinated Bonds and Subordinate Obligations.

### ARTICLE XIII MISCELLANEOUS

SECTION 1301. Defeasance.

- and payable only in Dollars may be defeased pursuant to the provisions of this Section, unless otherwise provided in a Supplemental Resolution. Defeasance provisions, if any, for Bonds denominated in a Foreign Currency or Currencies may be defeased pursuant to the provisions of this Section, as affected by the provisions of the related Supplemental Resolution. The System shall pay and indemnify the Fiscal Agent against any tax, fee or other charge imposed on or assessed against the Defeasance Securities deposited pursuant to this Article or the principal and interest received in respect thereof other than any such tax, fee or other charge which by law is for the account of the Bondowners.
- If the System shall pay or cause to be paid, or there shall otherwise be paid, to the Owners of all Bonds then Outstanding, the principal and interest and Redemption Price, if any, to become due thereon, at the times and in the manner stipulated therein and in this Resolution, then, at the option of the System, expressed in an instrument in writing signed by an Authorized Officer of the System and delivered to the Fiscal Agent, the covenants, agreements and other obligations of the System to the Bondowners shall be discharged and satisfied. In such event, and provided that all amounts owing to the Fiscal Agent and all Beneficiaries shall have been fully paid, the Fiscal Agent shall, upon the request of the System, execute and deliver to the System such instruments as may be desirable to evidence such discharge and satisfaction and the Fiscal Agent shall pay over or deliver to the System all money, securities and funds held by it pursuant to this Resolution which are not required for the payment or redemption of Bonds not theretofore surrendered for such payment or redemption.
- 3. Bonds (or any portion thereof) for the payment or redemption of which moneys shall have been set aside and shall be held in trust by the Fiscal Agent at the maturity or redemption date thereof shall be deemed to have been

paid within the meaning and with the effect expressed in paragraph 2 of this Section. Any Outstanding Bond (or portion thereof) shall, prior to the maturity or redemption date thereof, be deemed to have been paid within the meaning and with the effect expressed in paragraph 2 of this Section 1301 if (a) in case said Bond (or portion thereof) is to be redeemed on any date prior to its maturity, the System shall have given to the Fiscal Agent irrevocable instructions to give notice of redemption on said date of such Bond as provided in Article IV of this Resolution, (b) there shall have been deposited with the Fiscal Agent either moneys in an amount which shall be sufficient, or Defeasance Securities the principal of and interest on which when due and without reinvestment, except as provided below, will provide moneys which, together with the moneys, if any deposited with the Fiscal Agent at the same time, shall be sufficient to pay when due the principal or Redemption Price, if applicable, and interest due and to become due on said Bond (or portion thereof) on and prior to the redemption date or maturity date thereof, as the case may be, and (c) in the event said Bond is not by its terms subject to redemption or maturity within the next succeeding sixty (60) days, the System shall have given the Fiscal Agent irrevocable instructions to give, not less than seven (7) days after receipt of such instructions, a notice to the Owner of the Bond (or portion thereof) which is to be deemed to have been paid hereunder that the deposit required by (b) above has been made with the Fiscal Agent and that said Bond (or portion thereof) is deemed to have been paid in accordance with this Section and stating such maturity or redemption date upon which moneys are to be available for the payment of the principal or Redemption Price, if applicable, of and interest on said Bond (or portion thereof). Such notice shall be mailed, postage prepaid, to the Owner of said Bond (or portion thereof) at its last mailing address, if any, appearing on the registry books, but such mailing shall not be a condition precedent to the deemed payment of such Bond and failure so to mail, or failure by any Owner to receive, any such notice shall not affect the validity of the defeasance of such Bond (or portion thereof) as herein provided

Neither Defeasance Securities nor moneys deposited with the Fiscal Agent pursuant to this Section, nor principal or interest payments on any such Defeasance Securities, shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal or Redemption Price, if applicable, of and interest on said Bond (or portion thereof); provided that any cash received from such principal or interest payments on such Defeasance Securities deposited with the Fiscal Agent, if not then needed for such purpose, shall, to the extent practicable, be reinvested by the Fiscal Agent at the written direction of the System in Defeasance Securities maturing at the time or times and in the amount or amounts sufficient to pay when due the principal or Redemption Price, if applicable, of and interest to become due on said Bond (or portion thereof) on and prior to such redemption date or maturity date thereof, as the case may be. Any income or interest earned by, or increment to, the investment of any such moneys so deposited, in excess of the amounts required hereinabove to pay the principal of, Redemption Price, if applicable, of and interest on such Bond (or portion thereof), shall be deposited as realized by the Fiscal Agent in the Revenue Account. To the extent required by the provider of a Credit Facility, Bonds to which such Credit Facility relates shall not be deemed paid hereunder unless there shall have been delivered to the Fiscal Agent and the provider of such Credit Facility (a) a verification report of a firm of independent accountants verifying the sufficiency of the escrow created hereunder to timely make full payment of principal or Redemption Price, if applicable, of and interest on such Bond (or portion thereof) to the dates scheduled for such payment, and (b) an Opinion of Counsel to the effect that, based upon the assumptions stated in such opinion, such Bonds are deemed to be paid under this Section 1301.

4. For purposes of determining whether an Adjustable Rate Bond (or any portion thereof) shall be

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deemed to have been paid prior to the maturity or redemption date thereof, as the case may be, by the deposit of moneys, or Defeasance Securities and moneys, if any, in accordance with the second sentence of paragraph 3 of this Section, the interest to come due on such Adjustable Rate Bond (or portion thereof) on or prior to the maturity date or redemption date thereof, as the case may be, shall be calculated at the Maximum Interest Rate permitted by the terms thereof; provided, however, that if on any date, as a result of such Adjustable Rate Bond (or portion thereof) having borne interest at less than such Maximum Interest Rate for any period, the total amount of moneys and Defeasance Securities on deposit with the Fiscal Agent for the payment of interest on such Adjustable Rate Bond (or portion thereof) is in excess of the total amount which would have been required to be deposited with the Fiscal Agent on such date in respect of such Adjustable Rate Bond (or portion thereof) in order to satisfy the second sentence of paragraph 3 of this Section, the Fiscal Agent shall, if requested by the System, pay the amount of such excess to the System free and clear of any trust, pledge, lien, encumbrance or security interest created hereby.

An Option Bond (or any portion thereof) shall be deemed to have been paid in accordance with the second sentence of paragraph 3 of this Section only if, in addition to satisfying the requirements of clauses (a) and (c) of such sentence, there shall have been deposited with the Fiscal Agent moneys in an amount which shall be sufficient to pay when due the maximum amount of principal of and premium, if any, and interest on such Bond (or portion thereof) which could become payable to the Owner of such Bond upon the exercise of any options provided to said Owner; provided, however, that if, at the time a deposit is made with the Fiscal Agent pursuant to paragraph 3 of this Section, the options originally exercisable by said Owner are no longer exercisable, such Bond shall not be considered an Option Bond for purposes of this paragraph 5. If any portion of the moneys deposited with the Fiscal Agent for the payment of the principal of and premium, if any, and interest on said Option Bond (or portion thereof) is not required for such purpose, the Fiscal Agent shall, if requested by the System in writing, pay the amount of such excess to the System free and clear of any trust, pledge, lien, encumbrance or security interest created hereby.

Anything in this Resolution to the contrary notwithstanding, but subject to any applicable law to the contrary, any moneys held by the Fiscal Agent in trust for the payment of the principal of or premium, if any, or interest on any Bond which remain unclaimed for two (2) years after the date when such principal, premium, if any, or interest, as the case may be, has become due and payable, either at their stated maturity dates or by call for earlier redemption or otherwise, shall, at the written request of the System, be repaid by the Fiscal Agent to the System, as its absolute property and free from trust, and the Fiscal Agent shall thereupon be released and discharged with respect thereto and the Bondowner shall look only to the System for the payment of such principal, premium, if any, or interest, as the case may be; provided, however, that before being required to make any such payment to the System, the Fiscal Agent shall, at the expense of the System, cause to be published once in a newspaper or financial journal, customarily published at least once a day for at least five (5) days (other than legal holidays) in each calendar week, printed in the English language and of general circulation in the Borough of Manhattan, City and State of New York, a notice that said moneys remain unclaimed and that, after a date named in said notice, which date shall be not less than thirty (30) days after the date of the publication of such notice, the balance of such moneys then unclaimed will be returned to the System.

SECTION 1302. Evidence of Signatures of Bondowners and Owners of Bonds.

1. Any request, consent, revocation of consent or other instrument which this Resolution may require

or permit to be signed and executed by the Bondowners may be in one or more instruments of similar tenor, and shall be signed or executed by such Bondowners in person or by their attorneys appointed in writing. The fact and date of the execution by any Bondowner or his attorney duly authorized in writing of such instruments may be proved by a guarantee of the signature thereon by a bank or trust company or by the certificate of any notary public or other officer authorized to take acknowledgments of deeds, that the person signing such request or other instrument acknowledged to him the execution thereof, or by an affidavit of a witness of such execution, duly sworn to before such notary public or other officer. Where such execution is by an officer of a corporation or association or a member of a partnership, or on behalf of such a corporation, association or partnership, such signature guarantee, certificate or affidavit shall constitute proof of his authority.

- 2. The ownership of Bonds and the amount, numbers and other identification, and date of holding the same shall be proved by the registry books.
- 3. Any request or consent by the Owner of any Bond shall bind all future Owners of such Bond in respect of anything done or suffered to be done by the System or the Fiscal Agent in accordance therewith.

SECTION 1303. Moneys Held for Particular Bonds. The amounts held by the Fiscal Agent for the payment of the interest, principal or Redemption Price due on any date with respect to particular Bonds shall, on and after such date and pending such payment, be set aside on its books and held in trust by it for the Owners of such Bonds.

SECTION 1304. Preservation and Inspection of Documents. All documents received by the Fiscal Agent under the provisions of this Resolution shall be retained in its possession and shall be subject at all reasonable times to the inspection of the System, and any Bondowner or other Beneficiary and their agents and their representatives any of whom may make copies thereof.

SECTION 1305. Parties Interested Herein. Nothing in this Resolution expressed or implied is intended or shall be construed to confer upon, or to give to, any Person, other than the System, the Fiscal Agent, the Beneficiaries, and the Owners of the Bonds, any right, remedy or claim under or by reason of this Resolution or any covenant, condition or stipulation thereof; and all the covenants, stipulations, promises and agreements in this Resolution contained by and on behalf of the System shall be for the sole and exclusive benefit of the System, the Fiscal Agent, the Beneficiaries, and the Owners of the Bonds.

SECTION 1306. No Personal Liability. Neither the members of the System nor any other Person executing the Bonds or an Ancillary Bond Facility shall be subject to any personal liability or accountability by reason of the issuance or execution and delivery thereof.

SECTION 1307. Successors and Assigns. Whenever in this Resolution the System is named or referred to, it shall be deemed to include its successors and assigns and all the covenants and agreements in this Resolution contained by or on behalf of the System shall bind and inure to the benefit of its successors and assigns whether so expressed or not.

SECTION 1308. Severability of Invalid Provisions. If any one or more of the covenants or agreements provided in this Resolution on the part of the System or the Fiscal Agent to be performed should be contrary to law, then such covenant or covenants, agreement or agreements, shall be deemed severable from the remaining covenants and agreements, and shall in no way affect the validity of the other provisions, of this

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Resolution.

risk of interception and misuse by third parties.

SECTION 1309. Headings. The section headings contained herein are for reference purposes only and will not affect in any way the meaning or interpretation of this Resolution.

SECTION 1310. Conflict. All resolutions or parts of resolutions or other proceedings of the System in conflict herewith be and the same are repealed insofar as such conflict exists.

SECTION 1311. Governing Law. This Resolution shall be governed by, and construed and enforced in accordance with, the laws of the Commonwealth; provided, however, that the formalities leading to the creation of the trusts contained in this Resolution shall be governed by the laws of the State of New York and, provided further, to the maximum extent permitted by applicable law, the rights, duties, privileges and immunities of the Fiscal Agent, any paying agent and Bond Registrar, shall be governed by the law of the jurisdiction in which its Corporate Trust Office is located.

SECTION 1312. Notices. Any notice, demand, direction, request or other instrument authorized or required by this Resolution to be given to or filed with the System or the Fiscal Agent shall be deemed to have been sufficiently given or filed for all purposes of this Resolution if and when delivered:

To the System: Employees Retirement System of the Government of the Commonwealth of Puerto Rico P.O. Box 42003
San Juan, Puerto Rico 00940

437 Ponce de León Avenue Stop 32½ Hato Rey, Puerto Rico 00918

Telephone: (787) 754-4545 Fax: (787) 250-7251 Attn.: Administrator

To the Fiscal Agent: The Bank of New York 101 Barclay Street Floor 7W New York, New York 10286

Telephone: (212) 815-6955 Fax: (212) 815-5595 or 5596 Attn.: Northern Municipals Department

The System or the Fiscal Agent by notice to the other may designate additional or different addresses for subsequent notices or communications. Notwithstanding the foregoing, any notice, demand, request or other instrument to be given or filed with the Fiscal Agent shall be effective only upon receipt by the Fiscal Agent.

The Fiscal Agent shall have the right, but shall not be required, to rely upon and comply with instructions and directions sent by e-mail, facsimile and other similar unsecured electronic methods by persons believed by the Fiscal Agent to be authorized to give instructions and directions on behalf of the System. The Fiscal Agent shall have no duty or obligation to verify or confirm that the person who sent such instructions or directions is, in fact, a person authorized to give instructions or directions on behalf of the System; and the Fiscal Agent shall have no liability for any losses, liabilities, costs or expenses incurred or sustained by the System as a result of such reliance upon or compliance with such instructions or directions. The System agrees to assume all risks arising out of the use of such electronic methods to submit instructions and directions to the Fiscal Agent, including without limitation the risk of the Fiscal Agent acting on unauthorized instructions, and the

SECTION 1313. Jury Trial Waiver. EACH PARTY HERETO, AND EACH BONDOWNER AND BENEFICIARY BY ITS ACCEPTANCE OF THE BENEFITS OF THIS RESOLUTION, HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS RESOLUTION.

SECTION 1314. Effective Date. This Resolution shall take effect immediately upon its adoption.

#### EXHIBIT A

#### SECURITY AGREEMENT

This SECURITY AGREEMENT, dated as
of, 2008, is by and between the Employees Retirement
System of the Government of the Commonwealth of Puerto Rico
(the "Debtor") and Owners (this and other capitalized terms used
herein and not otherwise defined herein shall have the meanings
given to them in the Resolution referenced below) from time to
time of the Pension Funding Bonds of the Debtor (the "Pension
Funding Bonds") issued from time to time pursuant to the
provisions of the Debtor's Resolution No, adopted on
, 2008, as amended and supplemented from time to time
(the "Resolution"), and other Beneficiaries, which Owners and
Beneficiaries are represented for purposes of this Security
Agreement by The Bank of New York, as fiscal agent under the
Resolution (the "Secured Party"). Capitalized words not defined
herein shall have the meaning ascribed to them in the Resolution.

In order to provide security for the Debtor's payment of principal of, premium (if any) and interest on its Pension Funding Bonds and payment to Beneficiaries and the Fiscal Agent in accordance with their respective terms and the terms of the Resolution, Debtor hereby grants to the Secured Party a security interest in all Revenues; all right, title and interest of the System in and to Revenues, and all rights to receive the same; the Funds, Accounts, and Subaccounts held by the Fiscal Agent, and moneys and securities and, in the case of the Debt Service Reserve Account, Reserve Account Cash Equivalents, from time to time held by the Fiscal Agent under the terms of this Resolution, subject to the application thereof as provided in the Resolution; any and all other rights and real or personal property of every kind and nature from time to time hereafter pledged and assigned by the System to the Fiscal Agent as and for additional security for the Bonds and Parity Obligations; and, any and all cash and non-cash proceeds, products, offspring, rents and profits from any of the Pledged Property mentioned described herein, including, without limitation, those from the sale, exchange, transfer, collection, loss, damage, disposition, substitution or replacement of any of the foregoing.

Remedies for failure of the Debtor to make timely payment of principal of, premium (if any) and interest on the Pension Funding Bonds or failure of the Debtor to fulfill its other covenants contained in the Resolution for the benefit of the Owners of the Pension Funding Bonds are as set forth in the Resolution.

The Debtor shall cause UCC financing statements and continuation statements to be filed, as appropriate, and the Secured Party shall not be responsible for any UCC filings.

# EMPLOYEES RETIREMENT SYSTEM OF THE GOVERNMENT OF THE COMMONWEALTH OF PUERTO RICO

By :								
			e and Titl					
THE BANK Resolution	OF	NEW	YORK,	as	Fiscal	Agent	under	the
By:								
-		Name	e and Titl	e:	_			

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EXHIBIT B

#### DEFINITIONS

The following terms shall, for all purposes of this Resolution, have the following meanings, unless the context shall clearly indicate some other meaning:

Administrator shall mean the Administrator of the System pursuant to the Act.

Account or Accounts shall mean any account or accounts, including, without limitation, bank, deposit or securities accounts, as the case may be, established and created pursuant to this Resolution, but does not include any escrow or other fund or account established or created pursuant to Section 1301.

Accreted Amount shall mean, on any date and with respect to any particular Capital Appreciation Bond or Convertible Capital Appreciation Bond, the initial principal amount at issuance of such Bond plus accretion of principal, based on compounding on each Accretion Date to the date of maturity thereof (with respect to a Capital Appreciation Bond) or to the Current Interest Commencement Date (with respect to a Convertible Capital Appreciation Bond) at the same interest rate as shall produce a compounded amount on such date of maturity or Current Interest Commencement Date, as applicable, equal to the principal amount thereof on such date; provided, that Accreted Amount on any day which is not a Accretion Date shall be determined on the assumption that the Accreted Amount accrues in equal daily amounts between Accretion Dates.

Accretion Date shall mean the date on which interest on a Capital Appreciation Bond or Convertible Capital Appreciation Bond is compounded and added to principal in the form of Accreted Amount, as set forth in the related Supplemental Resolution.

Accrued Payment Obligation shall mean, with respect to any Class of Bonds and the related Parity Obligations or Subordinate Obligations, and for any Bond Year, as of any date, the aggregate of the Principal Installments of and interest on such Bonds, and the principal and interest components of such related Parity Obligations or Subordinate Obligations, due and unpaid during such Bond Year (or, in the case of Debt Service Account deposits, for Bonds with scheduled payments due more frequently that semi-annually, the current Bond Year and the first three months of the following Bond Year); provided that in the case of Adjustable Rate Bonds or Bonds other than fixed rate Bonds denominated in U.S. dollars, the interest shall be based on the Assumed Interest Rate. For purposes of this definition, principal, interest or other obligations for the payment for which the Fiscal Agent shall hold in escrow sufficient funds in a segregated account (including the Capitalized Interest Account and any escrow for the payment of Bonds that are defeased as provided in this Resolution) shall not be taken into consideration.

Act shall mean Act No. 447 of the Legislative Assembly of Puerto Rico, approved May 15, 1951, as amended and supplemented.

Adjustable Rate shall mean a variable, adjustable, convertible or similar interest rate or rates to be borne by a Series of Bonds or any one or more maturities within a Series of Bonds, for which the method of computing such variable interest rate is specified in the Supplemental Resolution authorizing such Bonds; *provided*, that the related Supplemental Resolution shall specify (i) whether a Qualified Hedge is to be applicable to such Adjustable Rate Bonds and, if not, or to the extent not so applicable, a Maximum Interest Rate, and (ii) the

method or methods for determining the Adjustable Rate and the frequency of change thereof; and provided further, that the method or methods for determining the Adjustable Rate may include the selection of such rate by an indexing agent or remarketing agent as provided in an agreement between the System and such agent, the utilization of an index or indices as described in the related Supplemental Resolution, the utilization of an auction as described in the related Supplemental Resolution, or such other standard or standards set forth by the System in the related Supplemental Resolution or any combination of the foregoing; and provided further, that the Adjustable Rate may never exceed any Maximum Interest Rate related thereto or, if none, the Legal Maximum Interest Rate.

Adjustable Rate Bond shall mean any Bond which bears an Adjustable Rate, provided that a Bond the interest rate on which shall have been fixed for the remainder of the term thereof shall no longer be deemed to bear interest at an Adjustable Rate.

Amortized Value, when used with respect to Investment Obligations purchased at a premium above or a discount below par, shall mean the value at any given date, as calculated by the Fiscal Agent, obtained by dividing the total premium or discount at which such Investment Obligations were purchased by the number of interest payment dates remaining to maturity on such Investment Obligations after such purchase and by multiplying the amount so calculated by the number of interest payment dates having passed since the date of such purchase; and (i) in the case of Investment Obligations purchased at a premium, by deducting the product thus obtained from the purchase price, and (ii) in the case of Investment Obligations purchased at a discount, by adding the product thus obtained to the purchase price.

Ancillary Bond Facility shall mean each Credit Facility, each Liquidity Facility, each Qualified Hedge, and each Standby Purchase Agreement.

Ancillary Facility Providers shall mean, collectively, each Credit Facility Provider, each Liquidity Facility Provider, each Qualified Hedge Provider, and each Standby Purchase Facility Provider.

Assumed Interest Rate shall mean, for Adjustable Rate Bonds, (i) a fixed rate payable by the System under a related Qualified Hedge plus the fixed component of interest on the related Bonds, if any, not included in the payments to be made under the Qualified Hedge by the Qualified Hedge Provider, (ii) for any Qualified Hedge that shall provide for payments from the System that result in a capped rate on the Adjustable Rate Bonds, such capped rate, or (iii) for any Adjustable Rate Bonds that shall not be the subject of a Qualified Hedge, the lesser of the Maximum Interest Rate established therefor and the Legal Maximum Interest Rate. The Supplemental Resolution relating to Bonds other than fixed rate Bonds denominated in U.S. dollars may include other provisions for determining the Assumed Interest Rate.

Authorized Officer shall mean (i) in the case of the System, the Administrator, and when used with reference to any act or document, any other person authorized by resolution of the System to perform such act or sign such document (the Fiscal Agent may request that the System deliver an officers' certificate setting forth the names of individuals and/or titles of officers authorized at such time to take specified actions pursuant to this Resolution), and (ii) in the case of the Fiscal Agent, any officer assigned to the Northern Municipals Department (or any successor division or unit) of the Fiscal Agent located at the Corporate Trust Office, or such other address as the Fiscal Agent may designate from time to time by notice to the

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System, who shall have direct responsibility for the administration of this Resolution, and for the purposes of the thirteenth sentence of Section 802 of this Resolution shall also include any other officer of the Fiscal Agent to whom any matter is referred because of such officer's knowledge of and familiarity with the particular subject.

**Beneficiaries** shall mean (i) the Owners of Bonds Outstanding, (ii) Credit Facility Providers and Liquidity Facility Providers as to which there are Parity Obligations or Subordinate Obligations outstanding, and (iii) Qualified Hedge Providers as to which there are Qualified Hedges outstanding.

**Bond** or **Bonds** shall mean the initial Series of Bonds and any additional Bonds authorized to be issued on a parity therewith pursuant to Section 202 or 708.

**Bondowner** shall mean any person who shall be the registered owner of any Outstanding Bond or Bonds.

**Bond Payment Date** shall mean each date on which Principal Installments of and/or interest on Bonds are due and payable by the System.

**Bond Year** shall mean a twelve-month period commencing on the second day of July in any calendar year and ending on the first day of July in the immediately succeeding calendar year.

Business Day shall mean any day other than (i) a Saturday or Sunday, or (ii) a day on which banking institutions in San Juan, Puerto Rico, New York, New York, or any city in which the principal office of the Fiscal Agent, Ancillary Facility Providers (if any), the Remarketing Agent (if any), the Tender Agent (if any), or the Auction Agent (if any) is located are authorized or required by law or executive order to remain closed.

Capital Appreciation Bonds shall mean the Bonds of any Series so designated in a Supplemental Resolution; provided, however, that the term "Capital Appreciation Bonds" shall only be used with respect to Bonds the interest on which is payable only at maturity or earlier redemption or acceleration of maturity, in amounts determined by reference to the Accreted Amount of each Bond.

Capitalized Interest Account shall mean the Capitalized Interest Account established pursuant to Section 502

**Class** shall mean the designation of Bonds by whether they are Senior Bonds or Subordinated Bonds.

Class Priority shall mean, at any time that there shall be Subordinated Bonds Outstanding, and with respect to funding of Debt Service Accounts and Debt Service Reserve Accounts pursuant to Section 504, and payment of Bonds upon an Event of Default under Article XI, funding or payment of the total amount then owing, as applicable, in the order of Senior Bonds and Parity Obligations first until full funding or payment thereof, followed by Subordinated Bonds and Subordinate Obligations of the highest payment priority next until full funding or payment thereof.

**Code** shall mean the United States Internal Revenue Code of 1986, as amended.

Commonwealth shall mean the Commonwealth of Puerto Rico.

Shall mean Bonds which, on or prior to the Current Interest Commencement Date, have the characteristics of Capital Appreciation Bonds and, after the Current Interest Commencement Date, have the characteristics of Current Interest Bonds, in each case with such further terms and conditions as may be designated

therefor in the Supplemental Resolution authorizing such Bonds.

Corporate Trust Office shall mean the office of the Fiscal Agent at which at any particular time its corporate trust business shall be principally administered, which office at the date of the adoption of this Resolution is located at 101 Barclay Street, 7W, New York, New York 10286, Attention: Northern Municipals Department, or such other address as the Fiscal Agent may designate from time to time by notice to the System, or the principal corporate trust office of any successor Fiscal Agent (or such other address as such successor Fiscal Agent may designate from time to time by notice to the System).

Covered Payroll shall mean the payroll of all employees of an Employer, other than its irregular and transitory employees, and other than the employees who are covered by one of the Commonwealth's other retirement systems (it being understood that the payroll of employees covered by the System's defined contribution plan constitutes Covered Payroll).

Credit Facility shall mean each irrevocable letter of credit, bond insurance policy, surety bond, loan agreement, or other agreement, facility or insurance or guaranty arrangement issued or extended by a bank, a trust company, a national banking association, an organization subject to registration with the Board of Governors of the Federal Reserve System under the Bank Holding Company Act of 1956 or any successor provisions of law, a federal branch pursuant to the International Banking Act of 1978 or any successor provisions of law, a savings bank, a savings and loan association, a Federal Home Loan Bank, a corporation, an insurance company or association chartered or organized under the laws of any state of the United States of America, the Government National Mortgage Association or any successor thereto, Fannie Mae, the Federal Home Loan Mortgage Corporation or any successor thereto, or any other federal or state agency or instrumentality approved by the System, which secures the payment of any Bond, or pursuant to which the System is entitled to obtain moneys to pay, in the Currency in which the Bonds of such Series are payable, the principal or Redemption Price of Bonds (or any related Qualified Hedges) due in accordance with their respective terms plus accrued interest thereon to the date of payment thereof in accordance herewith and with the Supplemental Resolution authorizing such Bonds, whether or not the System is in default under this Resolution; provided, that use of a Credit Facility shall not result, at the time of delivery of the Credit Facility, in a reduction in the Rating of any Bonds Outstanding; and provided further, that a substitute Credit Facility may be obtained from time to time (i) which shall contain the same material terms as set forth in the Credit Facility for which substitution is made, and (ii) will not, in and of itself, result in a Rating of the related Bonds lower than those which then prevailed.

**Credit Facility Provider** shall mean the Person who has executed a Credit Facility with the System, or otherwise has provided a Credit Facility at the request of the System, for the benefit of any of the Bonds.

**Currency** shall mean Dollars or Foreign Currency or Currency Unit.

**Currency Unit** shall mean a composite currency or currency unit the value of which is determined by reference to the value of the currencies of any group of countries.

**Current Interest Bonds** shall mean Bonds that bear interest which is not compounded but is payable on a current basis on established dates prior to maturity.

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Current Interest Commencement Date shall mean the date established prior to the issuance of each Series of Convertible Capital Appreciation Bonds, at which time the periodic compounding of interest ceases and on and after which date interest is payable currently on the Accreted Amounts on the next ensuing interest payment dates.

**Debt Service Account** shall mean the Account by that name established by Section 502.

**Debt Service Reserve Account** shall mean the Account by that name established by Section 502.

**Debt Service Reserve Requirement** shall mean, as of any date of calculation, fifty percent (50%) of the average of the Accrued Payment Obligation as of the first Business Day of each Bond Year for each of the following five (5) Bond Years

**Defeasance Obligations** shall mean any of the following which are not callable or redeemable at the option of the issuer thereof, if and to the extent the same are at the time legal for the investment of the System's funds:

- (i) Government Obligations;
- (ii) Defeased Municipal Obligations;
- certificates, depositary receipts or other instruments which evidence a direct ownership interest in obligations described in clauses (i) or (ii) above or in any specific interest or principal payments due in respect thereof; provided, however, that the custodian of such obligations or specific interest or principal payments shall be a bank or trust company organized under the laws of the United States of America, of the Commonwealth, or of any state or territory of the United States of America or of the District of Columbia, with a combined capital stock, surplus and undivided profits of at least \$50,000,000 or the custodian is appointed by or on behalf of the United States of America; and provided further, however, that except as may be otherwise required by law, such custodian shall be obligated to pay to the holders of such certificates, depositary receipts or other instruments the full amount received by such custodian in respect of such obligations or specific payments and shall not be permitted to make any deduction therefrom;
- (iv) a share or interest in a mutual fund, partnership or other fund wholly comprised of obligations described in clauses (i) through (v) above.

**Defeased Municipal Obligations** shall mean any bonds or other obligations of any state or territory of the United States of America, of the Commonwealth, or of any agency, instrumentality or local governmental unit of any such state or territory or Commonwealth which are not callable at the option of the obligor prior to maturity or as to which irrevocable instructions have been given by the obligor to call on the date specified in the notice; and

- (i) which are rated, based on an irrevocable escrow account or fund (the "escrow"), in the highest Rating category of any Rating Agency; or
- (ii) (a) which are fully secured as to principal, interest and redemption premium, if any, by an escrow consisting only of cash or Government

Obligations, which escrow may be applied only to the payment of such principal and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the specified redemption date or dates pursuant to such irrevocable instructions, as appropriate, and (b) which escrow is sufficient, without reinvestment, as verified by a nationally recognized independent certified public accountant, or other nationally recognized verification agent acceptable to the Fiscal Agent, to pay principal of and interest and redemption premium, if any, on the bonds or other obligations described in this paragraph on the maturity date or dates specified in the irrevocable instructions referred to above, as appropriate.

**Dollar** or \$ shall mean a dollar or other equivalent unit in such coin or currency of the United States as at the time of payment is legal tender for the payment of public and private debts.

**Employers** shall mean, pursuant to the Act, the government of Puerto Rico, or any Public Enterprise, or municipality, but shall exclude, however, those subsidiary enterprises of government instrumentalities whose employees, in the judgment of the Board of Trustees of the System, may not have a clear relationship of employee and employer with regard to the Commonwealth.

**Employers' Contributions** shall mean the contributions paid from and after the date hereof that are made by the Employers and any assets in lieu thereof or derived thereunder which are payable to the System pursuant to Sections 2-116, 3-105 and 4-113 of the Act.

**Employers' Contribution Rate** shall mean the rate of contribution of each Employer to the System, initially 9.275% of the Covered Payroll.

**Event of Default** shall mean an event described in paragraph 1 of Section 1101.

Financing Costs shall mean, with respect to any Bonds, all costs of issuance and any other fees, discounts, expenses and costs related to issuing, securing and marketing the Bonds.

First Supplemental Resolution shall mean the First Supplemental Pension Funding Bond Resolution, adopted by the System on January 24, 2008, in connection with the issuance of the Series A Bonds.

**Fiscal Agent** shall mean the bank, trust company or national banking association appointed pursuant to Section 801, and its successor or successors and any other bank, trust company or national banking association which may at any time be substituted in its place pursuant to the provisions of this Resolution.

**Fiscal Year** shall mean the fiscal year of the Commonwealth Government beginning July 1 of each calendar year.

**Fitch** shall mean Fitch Ratings, and its successors and assigns.

**Fixed Tender Bond** shall mean any Bond, not constituting an Adjustable Rate Bond, which by its terms must be tendered by the Owner thereof for purchase by or for the account of the System prior to the stated maturity thereof.

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**Foreign Currency** shall mean a currency issued by the government of any country other than the United States or a composite currency or currency unit the value of which is determined by reference to the values of the currencies of any group of countries.

**Fund** or **Funds** shall mean any fund or funds established and created pursuant to this Resolution, but does not include any escrow or other fund or account established or created pursuant to Section 1301.

**GDB** shall mean Government Development Bank for Puerto Rico and its successors and permitted assigns.

**General Reserve Account** shall mean the Account by that name established by Section 509.

Government Obligations shall mean direct obligations of, or obligations the principal of and the interest on which are unconditionally guaranteed by, the United States of America and entitled to the full faith and credit thereof.

Interest Subaccount shall mean the Interest Subaccount established in the Debt Service Account by Section 502.

**Investment Obligations** shall mean and include any of the following securities, if and to the extent the same are at the time legal for investment of the System's funds created by this Resolution for the benefit of the Bondowners:

- (i) Defeasance Obligations;
- (ii) Defeased Municipal Obligations;
- (iii) public housing bonds issued by public agencies or municipalities and fully secured as to the payment of both principal and interest by a pledge of annual contributions under an annual contributions contract or contracts with the United States of America; temporary notes, preliminary loan notes or project notes issued by public agencies or municipalities, in each case fully secured as to the payment of both principal and interest by a requisition or payment agreement with the United States of America; or obligations issued by any state or territory or any public agencies or municipalities which are obligations rated in the highest Rating category by a Rating Agency;
- (iv) direct and general obligations of any state or territory of the United States to the payment of the principal of and interest on which the full faith and credit of such jurisdiction is pledged which obligations are rated in either of the two highest Rating categories by a Rating Agency;
- (v) direct obligations of, or obligations guaranteed as to timely payment of principal and interest by, the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, or the Federal Farm Credit System;
- (vi) prime commercial paper of a corporation incorporated under the laws of any state or territory of the United States of America, rated "P-1", "A-1" or "F1" by Moody's, Standard & Poor's or Fitch, respectively;
- (vii) money market shares of a diversified open-end management investment company

as defined in the Investment Company Act of 1940, which company has been rated "A" or better by Moody's, Standard & Poor's or Fitch or money market accounts of the Fiscal Agent or any bank or trust company organized under the laws of the United States or any state thereof, which has a combined capital and surplus of not less than \$50,000,000;

- (viii) deposits evidenced by certificates of deposit issued by banks (which may include the Fiscal Agent) that are members of the Federal Deposit Insurance Corporation, provided that such time deposits are fully secured by obligations described in clause (i) or (ii) above, which such obligations at all times have a market value (exclusive of accrued interest) at least equal to the amount of such bank deposits so secured, including interest;
- (ix) repurchase agreements relating to securities of the type specified in clauses (i) and (ii) above, *provided* that such securities in an amount at least equal to the face value of such agreements shall be delivered as security for such agreements to (or for) the account of the Fiscal Agent to be held therein during the term of the agreements;
- (x) investment agreements, secured or unsecured, with any Person whose debt securities are rated at least "AA" (or equivalent rating of short-term obligations if the investment is for a period not exceeding one year) by Standard & Poor's or equivalent Rating by Moody's, Fitch or other Rating Agency; and
- (xi) any other obligations conforming to System guidelines for investment as provided by the System to the Fiscal Agent from time to time, so long as such obligations are rated at least in the two highest Rating Categories of each of the Rating Agencies and are approved by the applicable Credit Facility Provider.

**Legal Maximum Interest Rate** shall mean the highest rate of interest or highest true interest cost that by law may be borne by any Bonds; at present, 12% per annum.

Liquidity Facility shall mean an irrevocable letter of credit, surety bond, loan agreement, Standby Purchase Agreement, line of credit or other agreement or arrangement issued or extended by a bank, a trust company, a national banking association, an organization subject to registration with the Board of Governors of the Federal Reserve System under the Bank Holding Company Act of 1956 or any successor provisions of law, a federal branch pursuant to the International Banking Act of 1978 or any successor provisions of law, a savings bank, a savings and loan association, a Federal Home Loan Bank, an insurance company or association chartered or organized under the laws of the Commonwealth or any state of the United States of America, the Government National Mortgage Association or any successor thereto, Federal National Mortgage Association or any successor thereto, the Federal Home Loan Mortgage Corporation or any successor thereto, or any other government sponsored enterprise or federal, state or Commonwealth agency or instrumentality approved by the System, pursuant to which the System is entitled to obtain moneys upon the terms and conditions contained therein for the purchase or redemption of Bonds tendered for purchase or redemption in accordance with the terms hereof and of the Supplemental Resolution authorizing such Bonds; provided, that the use of the Liquidity Facility shall not result, at the time it is delivered, in a reduction in the Rating of any Bonds Outstanding; and provided further that a substitute Liquidity Facility may be obtained from time to time (i) which shall contain the same material terms as set forth in the Liquidity Facility for which

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substitution is being made, and (ii) will not, in and of itself, result in a Rating of any Bonds Outstanding lower than those which then prevailed.

**Liquidity Facility Provider** shall mean the Person who has executed a Liquidity Facility with the System, or otherwise has provided a Liquidity Facility at the request of the System, for the benefit of any of the Bonds.

Maturity Amount shall mean the Accreted Amount of any Capital Appreciation Bond or Convertible Capital Appreciation Bond due as of the stated maturity thereof.

Maximum Interest Rate shall mean, with respect to any particular Adjustable Rate Bond, a numerical rate of interest, which shall be set forth in the Supplemental Resolution authorizing such Bond, that as a matter of contract shall be the maximum rate at which such Bond may bear interest at any time; provided, that the Maximum Interest Rate may not exceed the Legal Maximum Interest Rate.

**Moody's** shall mean Moody's Investors Service, and its successors and assigns.

Operating Expenses shall mean the reasonable out-of-pocket expenses of the System related to the issuance of the Bonds (including, without limitation, the out-of pocket costs of preparation of accounting and other reports, costs of maintenance of the ratings on Bonds, and insurance premiums, deductibles and retention payments,), legal fees, fees and expenses incurred for professional consultants and fiduciaries, and regularly scheduled fees payable under each Credit Facility and Liquidity Facility. Whenever a requisition for "Operating Expenses" from the Revenue Account shall be made pursuant to Section 505, a certificate of an Authorized Officer of the System, stating that such amount constitutes "Operating Expense" as defined in this Resolution, shall be delivered to the Fiscal Agent. Operating Expenses shall not include those expenses owed to the Fiscal Agent under Section 804.

**Opinion of Counsel** shall mean an opinion signed by an attorney or firm of attorneys of recognized standing (who may be counsel to the System) of recognized standing in the field of law relating to municipal bonds selected by the System and satisfactory to the Fiscal Agent.

**Option Bond** shall mean any Bond which by its terms may be tendered by and at the option of the Owner thereof for redemption or purchase by (or for the account of) the System prior to the stated maturity thereof, or the maturity of which may be extended by and at the option of the Owner thereof.

Original Principal Amount shall mean the original principal amount of any Capital Appreciation Bond or Convertible Capital Appreciation Bond at the date of original issuance, as stated in the Supplemental Resolution relating to such bonds.

**Outstanding**, when used with reference to the Bonds as a whole or the Bonds of a Series, shall mean, as of any date, the Bonds or Bonds of such Series, as the case may be, theretofore or thereupon being delivered and issued under the provisions of this Resolution, except:

- (i) any Bonds canceled by or surrendered for cancellation to the Fiscal Agent at or prior to such date;
- (ii) Bonds deemed to have been paid as provided in Section 1301;

- (iii) Bonds in lieu of or in substitution for which other Bonds shall have been authenticated and delivered pursuant to Article III or Section 1007;
- (iv) Option **Bonds** tendered or deemed tendered in accordance with the provisions of the Supplemental Resolution authorizing such Bonds on the applicable tender date, if the purchase price thereof and interest thereon through such date shall have been paid or amounts are available and set aside for such payment as provided in such Supplemental Resolution, except to the extent such tendered Option Bonds are held by the System or a Credit Facility Provider or a Liquidity Facility Provider and/or thereafter may be resold pursuant to the terms thereof and of such Supplemental Resolution; and
- (v) as may be provided with respect to such Bonds by the Supplemental Resolution authorizing such Bonds;

provided, however, that in determining whether the Owners of the requisite principal amount of Outstanding Bonds have given any request, demand, authorization, direction, notice, consent or waiver hereunder, (i) Bonds owned by the System shall be disregarded and deemed not to be Outstanding, except that, in determining whether the Fiscal Agent shall be protected in relying upon any such request, demand, authorization, direction, notice, consent or waiver, only Bonds which an Authorized Officer of the Fiscal Agent knows to be so owned shall be so disregarded. Bonds so owned which have been pledged in good faith may be regarded as Outstanding if the pledgee establishes to the satisfaction of the Fiscal Agent the pledgee's right so to act with respect to such Bonds and that the pledgee is not the System, and (ii) the principal amount of a Convertible Capital Appreciation Bond or a Capital Appreciation Bond that shall be deemed Outstanding for such purposes shall be the Accreted Amount thereof except as otherwise provided in this Resolution.

Owner or Owner of Bonds shall mean each

Bondowner.

Parity Hedge Obligations shall mean, as allocated to a Series of Bonds pursuant to the terms of the related Supplemental Resolution, fixed and scheduled payments by the System under Qualified Hedges. Parity Hedge Obligations shall not include, among other things, any costs, indemnities, termination payments or similar non-recurring amounts, or any amortization of such non-recurring amounts.

**Parity Obligations** shall mean, collectively, all Parity Reimbursement Obligations and Parity Hedge Obligations.

Parity Reimbursement Obligations shall mean, as allocated to a Series of Bonds pursuant to the terms of the related Supplemental Resolution, fixed and scheduled payments due from the System to any Credit Facility Provider or Liquidity Facility Provider, as provided by Section 206, whether such reimbursements or payments are made to the Credit Facility Provider or Liquidity Facility Provider as a Bondowner, as a subrogee or otherwise. Parity Reimbursement Obligations shall include, among other things, reimbursements of direct-pay letters of credit to be drawn on each principal and/or interest payment date.

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**Person** or **Persons** shall mean an individual, partnership, limited liability partnership, corporation, limited liability corporation, trust or unincorporated organization and a government or agency or political subdivision or branch thereof.

Pledged Property shall mean the following, collectively (but without duplication), except as otherwise may be provided with respect to a Series of Bonds by the Supplemental Resolution authorizing such Bonds:

### 1. All Revenues.

- All right, title and interest of the System in and to Revenues, and all rights to receive the same.
- 3. The Funds, Accounts, and Subaccounts held by the Fiscal Agent, and moneys and securities and, in the case of the Debt Service Reserve Account, Reserve Account Cash Equivalents, from time to time held by the Fiscal Agent under the terms of this Resolution, subject to the application thereof as provided in this Resolution and to the provisions of Sections 1301 and 1303.
- 4. Any and all other rights and personal property of every kind and nature from time to time hereafter pledged and assigned by the System to the Fiscal Agent as and for additional security for the Bonds and Parity Obligations.
- 5. Any and all cash and non-cash proceeds, products, offspring, rents and profits from any of the Pledged Property mentioned described in paragraphs (1) through (4) above, including, without limitation, those from the sale, exchange, transfer, collection, loss, damage, disposition, substitution or replacement of any of the foregoing.

Principal Installment shall mean, as of any date with respect to any Series, so long as any Bonds thereof are Outstanding, the sum of (i) the principal amount and Accreted Amount (to the extent applicable) of Bonds of such Series (including the principal amount of Option Bonds tendered for payment and not purchased) due (or so tendered for payment and not purchased) on such date for which no Sinking Fund Installments have been established, and (ii) the unsatisfied balance (determined as provided in Section 507) of any Sinking Fund Installments due on such date for Bonds of such Series, together with the premiums, if any, payable upon the redemption of such Bonds by application of such Sinking Fund Installments.

**Principal Subaccount** shall mean the Principal Subaccount established in the Debt Service Account by Section 502.

**Public Enterprise** shall mean any government instrumentality or public corporation of the Commonwealth.

Qualified Hedge shall mean, with respect to particular Bonds, (i) any financial arrangement (a) which is entered into by the System with an entity that is a Qualified Hedge Provider at the time the arrangement is entered into, (b) which is a cap, floor or collar, forward rate, future rate, swap (such swap may be based on an amount equal either to the principal amount of such Bonds as may be designated or a notional principal amount relating to all or a portion of the principal amount of such Bonds), asset, index, Currency, price or market-linked transaction or agreement, other exchange or rate protection transaction agreement, other

similar transaction (however designated), or any combination thereof, or any option with respect to any of the foregoing, executed by the System, and (c) which has been designated as a Qualified Hedge with respect to such Bonds in a written determination signed by an Authorized Officer and delivered to the Fiscal Agent, and (ii) any Credit Facility securing the obligations of the System under any financial arrangement described in clause (i) above. Each Qualified Hedge shall provide that the System and the Qualified Hedge Provider shall provide not less than ten-days' prior written notice of any amendment to the Fiscal Agent.

Qualified Hedge Provider shall mean a Person whose long-term obligations, other unsecured, long-term obligations, financial program rating, counterparty rating, or claims paying ability, or whose payment obligations under an agreement that would be a Qualified Hedge are guaranteed by an entity whose long term debt obligations, other unsecured long term obligations, financial program rating, counterparty rating, or claims paying ability, are rated, or whose payment obligations under an interest rate exchange agreement are collateralized in such manner as to cause such agreement to be rated, at the time of the execution of such Qualified Hedge, either (i) at least as high as the third highest Rating Category of each Rating Agency, but in no event lower than any Rating Category designated by any such Rating Agency for the Bonds subject to such Qualified Hedge (without reference to bond insurance, if any), or (ii) any such lower Rating Categories which each such Rating Agency indicates in writing to the System and the Fiscal Agent will not, by itself, result in a reduction or withdrawal of its Rating (without reference to bond insurance, if any) on the Outstanding Bonds, and (iii) a Person whose payment obligations under an interest rate exchange agreement are subject to collateralization requirements that, as evidenced in writing to the System and the Fiscal Agent by each Rating Agency, will not, by itself, result in a reduction or withdrawal of its Rating (without reference to bond insurance, if any) on the Outstanding Bonds.

Rating shall mean a rating published by a Rating Agency with respect to any or all Bonds. Any provision of this Resolution that specifies that an action may not be taken if it shall result in a reduction, suspension or withdrawal of the Rating of the Bonds, with respect to any Bonds that are the subject of a Credit Facility, shall mean the Rating of such Bonds without taking into account the credit enhancement provided by such Credit Facility.

Rating Agency shall mean each nationally recognized statistical rating organization then maintaining a rating on the Bonds at the request of the System.

Rating Category shall mean one of the generic rating categories of any Rating Agency without regard to any refinement or gradation of such rating within any such category by a numerical modifier or otherwise.

**Record Date** shall mean, with respect to each payment of interest on a Bond, each date specified as the "record date" therefor in the Supplemental Resolution authorizing such Bond, or if no such date is specified, the 15<sup>th</sup> day of the month preceding the date of such payment.

**Redemption** Account shall mean the Account by that name established by Section 502.

Redemption Price shall mean, when used with respect to a Bond (other than a Convertible Capital Appreciation Bond or a Capital Appreciation Bond) or a portion thereof to be redeemed, the principal amount of such Bond or such portion thereof plus the applicable premium, if any, and, when used with respect to a Convertible Capital Appreciation Bond or a Capital Appreciation Bond, shall mean the Accreted Amount on

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the date of redemption of such Bond (or portion thereof) plus the applicable premium, if any, payable in either case upon redemption thereof, pursuant to this Resolution and the applicable Supplemental Resolution.

**Refunding Bonds** shall mean all Bonds authenticated and delivered on original issuance pursuant to Section 204 or thereafter authenticated and delivered in lieu of or in substitution for any such Bond pursuant to this Resolution and the applicable Supplemental Resolution.

Reserve Account Cash Equivalent shall mean a letter of credit, insurance policy, surety, guaranty or other security arrangement provided to the Fiscal Agent as a substitute for the deposit of cash and/or Investment Securities, or another Reserve Account Cash Equivalent, in the Debt Service Reserve Account pursuant to Section 506. Each such arrangement shall be provided by a Person whose claims paying ability has been assigned a rating from each Rating Agency at least equal to the then existing rating on the Bonds or whose unsecured, long-term debt securities are rated by each Rating Agency at least equal to the then existing Rating on the Bonds (or the highest short-term rating if the Reserve Account Cash Equivalent has a remaining term measured from the date it is provided not exceeding one year).

**Resolution** shall mean this Bond Resolution, as from time to time amended or supplemented by Supplemental Resolutions.

**Revenue Account** shall mean the Account by that name established by Section 502.

**Revenues** shall mean the following, collectively (but without duplication), except as otherwise may be provided with respect to a Series of Bonds by the Supplemental Resolution authorizing such Bonds:

- 1. All Employers' Contributions received by the System or the Fiscal Agent.
- 2. With respect to any particular Bonds, the proceeds of any draw on or payment under any Credit Facility which is intended for the payment of such Bonds, but only for purposes of such payment and not for other purposes of this Resolution.
- Net amounts received by the System pursuant to a Qualified Hedge.
- 4. Income and interest earned and gains realized in excess of losses suffered by any Fund, Account, or Subaccount held by the Fiscal Agent under the terms of this Resolution, subject to the provisions of Sections 1301 and 1303.
- 5. Any other revenues, fees, charges, surcharges, rents, proceeds or other income and receipts received by or on behalf of the System or by the Fiscal Agent, lawfully available for the purposes of this Resolution and deposited by or on behalf of the System or by the Fiscal Agent in any Fund, Account, or Subaccount held by the Fiscal Agent under the terms of this Resolution, subject to the provisions of Sections 1301 and 1303.

**Security Agreement** means the Security Agreement dated as of January 31, 2008 between the System and the Fiscal Agent, in the form appended hereto as Appendix A.

**Senior Bonds** shall mean the Series A Bonds and any Bonds of a Class the priority of payment of which under this Resolution is equal with that of the Series A Bonds.

**Serial Bonds** shall mean Bonds which have no Sinking Fund Installment.

Series shall mean all of the Bonds authenticated and delivered on original issuance identified pursuant to a Supplemental Resolution as a separate series of Bonds, and any Bonds thereafter authenticated and delivered in lieu of or in substitution therefor pursuant to Article III or Section 1007, regardless of variations in maturities, principal amounts, interest rates or other provisions.

**Series A Bonds** shall mean the System's Senior Pension Funding Bonds, Series A, the initial Series of Bonds to be issued under this Resolution.

Sinking Fund Installment shall mean, when used with respect to any Series of Bonds, the amount of principal or Accreted Amount, as the case may be, due prior to maturity on Bonds of a given maturity on any particular due date as specified in the Supplemental Resolution pursuant to which such Series was issued.

**Standard & Poor's** shall mean Standard & Poor's Ratings Service, a division of The McGraw-Hill Companies, Inc., and its successors and assigns.

**Standby Purchase Agreement** shall mean an agreement by and between the System and another Person pursuant to which such Person is obligated to purchase Option Bonds or Fixed Tender Bonds tendered for purchase.

**Standby Purchase Provider** shall mean the Person who has executed a Standby Purchase Agreement with the System.

Subaccount or Subaccounts shall mean any subaccount or subaccounts, as the case may be, in each case which may be in the form of a separate account, established or created pursuant to this Resolution, but does not include any escrow or other fund or account established or created pursuant to Section 1301.

**Subordinated Bonds** shall mean Bonds of a Series, the priority of payment of which under this Resolution is subordinate to payment of the Senior Bonds.

**Subordinate Obligations** shall mean, as allocated to each Series of Bonds by Class pursuant to the terms of the related Supplemental Resolution, payment obligations to Persons of the type that otherwise would be classified under this Resolution as Parity Obligations but are subject instead, pursuant to the provisions of the applicable Supplemental Resolutions, to subordination to Parity Obligations under this Resolution on the terms and conditions set forth in such Supplemental Resolutions.

Supplemental Resolution shall mean any resolution supplemental to or amendatory of this Resolution or any Supplemental Resolution, adopted by the System in accordance with Articles IX and X.

**Term Bonds** shall mean Bonds having a single stated maturity date, some of which may have Sinking Fund Installments to be specified in a Supplemental Resolution.

The terms "hereby," "hereof," "hereto,"

# Case:17-03283-LTS Doc#:7554-21 Filed:06/21/19 Entered:06/21/19 21:37:57 Desc: Exhibit U Page 181 of 217 "herein," "hereunder," and any similar terms as used in this Resolution, refer to this Resolution. All references to Articles and Sections in this Resolution refer to the Articles and Sections in the Resolution refer to the Articles and Sections in the Resolution refer to the Articles and Sections in the Resolution refer to the Resolution refer to the Resolution refer to

Sections in this Resolution refer to the Articles and Sections hereof  $unless\ otherwise\ expressly\ stated.$ 

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THIRD SUPPLEMENTAL PENSION FUNDING BOND RESOLUTION

authorizing

SENIOR PENSION FUNDING BONDS SERIES C

Adopted on June 26, 2008

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#### THIRD SUPPLEMENTAL PENSION FUNDING BOND RESOLUTION

#### authorizing

#### SENIOR PENSION FUNDING BONDS SERIES C

BE IT RESOLVED by the Employees Retirement System of the Government of the Commonwealth of Puerto Rico (the "System"), as follows:

#### **ARTICLE I**

#### **DEFINITIONS AND STATUTORY AUTHORITY**

SECTION 1.1. <u>Supplemental Resolution</u>. This Third Supplemental Pension Funding Bond Resolution (this "**Supplemental Resolution**") is supplemental to, and is adopted in accordance with, Article II and Article IX of the Employees Retirement System of the Government of the Commonwealth of Puerto Rico Pension Funding Bond Resolution, as amended, adopted by the System on January 24, 2008 (the "**General Resolution**"). The General Resolution and this Supplemental Resolution are hereinafter collectively referred to as the "**Resolution**".

SECTION 1.2. <u>Definitions</u>. 4) All terms which are defined in *Exhibit B* of the General Resolution or Section 1.1 hereof, unless otherwise defined in subsection (b) of this Section, shall, for all purposes of this Supplemental Resolution, have the same meanings as such terms are given in *Exhibit B* of the General Resolution or Section 1.1 hereof, respectively, unless the context shall clearly indicate some other meaning.

The following terms shall, for all purposes of this Supplemental Resolution, have the following meanings, unless the context shall clearly indicate some other meaning:

- **"Beneficial Owner"** means, whenever used with respect to a Series C Bond, the Person in whose name such Series C Bond is recorded as the beneficial owner of such Series C Bond by a Participant on the records of such Participant or such Person's subrogee.
- "Capital Appreciation Bonds" mean the Series C Bonds in the aggregate principal amount of \$2,202,930 maturing July 1, 2030, as to which interest is not paid on a current basis but is accrued and compounded as its Accreted Amount, and as more fully described in Section 2.3(a) below.
- "Cede & Co." means Cede & Co., the nominee of DTC, and any successor of DTC with respect to the Series C Bonds.
- "Current Interest Term Bonds" means the Series C Bonds maturing July 1, 2028 in the principal amount of \$110,000,000, bearing interest at a rate of 6.15%, July 1, 2038 in the principal amount of \$45,000,000, bearing interest at a rate of 6.25%, and July 1, 2043 in the principal amount of \$143,000,000, bearing interest at a rate of 6.30%.
- "Interest Payment Date" means the first day of each month, commencing August 1, 2008; *provided*, that if any Interest Payment Date is a day that is not a Business Day, interest accrued to that day shall be paid on the next succeeding Business Day, without any additional interest on the amount so paid.

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- **"Participants"** means those broker-dealers, banks and other financial institutions for which DTC holds Series C Bonds as securities depositary.
- "Record Date" means the fifteenth calendar day (whether or not a Business Day) of the month next preceding such Interest Payment Date.
- **"Series C Bonds"** means the System's Senior Pension Funding Bonds, Series C, authorized by Article II of this Supplemental Resolution.
- SECTION 1.3. <u>Interpretation</u>. Unless the context clearly otherwise requires, this Supplemental Resolution shall be interpreted in accordance with applicable provisions of the General Resolution.
- <u>SECTION 1.4. Authority for this Supplemental Resolution</u>. This Supplemental Resolution is adopted pursuant to the provisions of the Act and the General Resolution.

#### **ARTICLE 11**

#### **AUTHORIZATION OF SERIES C BONDS**

SECTION 2.1 <u>Principal Amount, Designation and Series</u>. Pursuant to the provisions of the General Resolution, a Series of Bonds to be designated as "Senior Pension Funding Bonds," which Series shall be entitled to the benefit, protection and security of such provisions, is hereby authorized, further designated "Series C" in the aggregate initial principal amount at issuance of \$300,202,930.00. All of such Bonds shall constitute "Senior Bonds" under the Resolution.

SECTION 2.2. <u>Purposes</u>. The Series C Bonds are being issued for the purpose of providing the System with funds (i) to increase the total assets currently available to pay benefits under the System's defined benefit plan that has been closed to new participants since December 31, 1999, (ii) to reduce the unfunded accrued actuarial pension liability of this defined benefit plan, (iii) to fund the Debt Service Reserve Account, up to the Debt Service Requirement, and (iv) to pay Financing Costs, including but not limited to Costs of Issuance.

SECTION 2.3 <u>Details of Series C Bonds</u>. (a) The Series C Bonds shall be dated as of, and shall bear interest (or their interest shall compound) initially from, the initial date of delivery thereof and payment therefor, and shall mature in the years and in the principal amounts, and (except for Capital Appreciation Bonds) bear interest payable on each Interest Payment Date at the interest rates per annum, as set forth below:

#### \$2,202,930.00 Capital Appreciation Bonds

\$2,202,930 Capital Appreciation Bonds due July 1, 2030 (maturity value \$9,000,000)

#### \$298,000,000.00 Current Interest Term Bonds

\$110,000,000 6.15% Current Interest Term Bonds due July 1, 2028 \$45,000,000 6.25% Current Interest Term Bonds due July 1, 2038 \$143,000,000 6.30% Current Interest Term Bonds due July 1, 2043

- (b) The Series C Bonds shall consist of the Current Interest Term Bonds and the Capital Appreciation Bonds.
- (c) Interest on the Current Interest Term Bonds, and Accreted Amount on the Capital Appreciation Bonds, shall be computed on the basis of a 360-day year of twelve 30-day months. Interest on the Current Interest Term Bonds shall be payable on each Interest Payment Date. Accreted Amounts on the Capital Appreciation Bonds shall be computed each July 1 and January 1, commencing January 1, 2009.
- (d) The Series C Bonds shall be issuable in denominations of \$5,000 principal amount (\$5,000 maturity amount for Capital Appreciation Bonds) or integral multiples thereof. Each Series C Bond shall be lettered "CR" and shall be numbered consecutively from (1) upwards in order of authentication by the Fiscal Agent or otherwise in such manner as the Fiscal Agent in its discretion shall determine.

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- (e) The Series C Bonds shall be issued with the intention that interest thereon is included in gross income for federal income tax purposes.
- (f) Except as otherwise provided in Section 2.5, the principal of and premium, if any, on any Series C Bond shall be payable upon presentation and surrender of such Bond at the Corporate Trust Office of the Fiscal Agent. Except as otherwise provided in Section 2.5, interest on the Series C Bonds shall be paid by check or draft of the Fiscal Agent mailed to the Owners thereof as of the applicable Record Date at their respective addresses as shown on the registration books of the System maintained by the Fiscal Agent, or, at the option of the Owner of \$1,000,000 or more in principal amount at maturity of the Series C Bonds, by written notice to the Fiscal Agent from such Owner at least fifteen (15) calendar days prior to the related payment date, by wire transfer.

SECTION 2.4 Redemption. (a) The Series C Bonds due on July 1, 2028, July 1, 2038, and July 1, 2043 shall be redeemed in part through application of Sinking Fund Installments as provided in Sections 403 and 507 of the General Resolution, in each case at a Redemption Price equal to the principal amount of such Bond or portion thereof to be redeemed together with interest accrued to the date fixed for redemption. Subject to the provisions of Section 507 of the General Resolution permitting amounts to be credited toward part or all of any Sinking Fund Installment, with respect to such Bond, there shall be due and the System shall in any and all events be required to pay on each Sinking Fund Installment date set forth in the following table the amount set opposite such date, and said amount is hereby established and shall constitute a Sinking Fund Installment for the retirement of such Bond; provided, however, that the principal amount set opposite the maturity date in said table shall be payable on such date and shall not constitute a Sinking Fund Installment:

Sinking Fund	Term Bonds due	Term Bonds due	Term Bonds due
<b>Installment Date</b>	<b>July 1, 2028</b>	<b>July 1, 2038</b>	<b>July 1, 2043</b>
07/01/2024	\$18,700,000		
07/01/2025	22,000,000		
07/01/2026	29,150,000		
07/01/2027	36,300,000		
07/01/2028*	3,850,000		
07/01/2029		\$ 100,000	
07/01/2030		540,000	
07/01/2031		100,000	
07/01/2032		3,420,000	
07/01/2033		4,320,000	
07/01/2034		100,000	
07/01/2035		11,940,000	
07/01/2036		2,160,000	
07/01/2037		7,920,000	
07/01/2038*		14,400,000	
07/01/2039			\$28,600,000
07/01/2040			28,600,000
07/01/2041			28,600,000
07/01/2042			28,600,000
07/01/2043*			28,600,000

<sup>\*</sup>Maturity Date

<sup>(</sup>b) The Current Interest Term Bonds shall be subject to redemption at the option of the System from any source, including without limitation the proceeds of Refunding Bonds or other financing provided by the System, in whole or in part in any order of maturity determined by the System, at any time on and after July 1, 2018, at a Redemption Price equal to the principal amount thereof plus interest, if any, accrued to the redemption date, without premium.

<sup>(</sup>c) The Capital Appreciation Bonds shall be subject to redemption at the option of the System from any source, including without limitation the proceeds of Refunding Bonds or other financing provided by the System, in whole or in part in any order of maturity determined by the System, at any time on and after July 1, 2018, at a Redemption Price equal to the Accreted Amount thereof, without premium.

SECTION 2.5 <u>Book-Entry Provisions</u>. (a) *Except* as provided in subsection (d) of this Section, the Owner of all of the Series C Bonds shall be Cede & Co., as nominee for DTC, and the Series C Bonds shall be registered in the name of Cede & Co., as nominee for DTC. Payment of interest on any Series C Bond registered in the name of Cede & Co. shall be made by wire transfer of Federal or equivalent same day funds to the account of Cede & Co. on the Interest Payment Date for the Series C Bonds at the address indicated for Cede & Co. in the registration books of the System maintained by the Fiscal Agent.

- (b) The Series C Bonds initially shall be issued in the form of separate single authenticated fully registered Bonds in the amount of each separate stated maturity and for each separate "CUSIP" number within a maturity of the Series C Bonds. The Fiscal Agent and the System may treat DTC (or its nominee) as the sole and exclusive Owner of the Series C Bonds registered in its name for the purposes of payment of the principal or Redemption Price of or interest on the Series C Bonds, selecting the Series C Bonds or portions thereof to be redeemed, giving any notice permitted or required to be given to Owners of the Series C Bonds under the General Resolution or this Supplemental Resolution, registering the transfer of the Series C Bonds, obtaining any consent or other action to be taken by Owners of the Series C Bonds and for all other purposes whatsoever, and neither the Fiscal Agent nor the System shall be affected by any notice to the contrary. The Fiscal Agent and the System shall not have any responsibility or obligation to any Participant, any Person claiming a beneficial ownership interest in the Series C Bonds under or through DTC or any Participant, or any other Person who is not shown on the registration books as being an Owner of the Series C Bonds, with respect to the accuracy of any records maintained by DTC or any Participant; the payment of DTC or any Participant of any amount in respect of the principal or Redemption Price of or interest on the Series C Bonds; any notice which is permitted or required to be given to Owners of the Series C Bonds under the General Resolution or this Supplemental Resolution; the selection by DTC or any Participant of any Person to receive payment in the event of a partial redemption of the Series C Bonds; or any consent given or other action taken by DTC as Owner of the Series C Bonds.
- (c) The Fiscal Agent shall pay all principal of, and premium, if any, and interest on the Series C Bonds only to or "upon the order of" Cede & Co., as nominee for DTC, and all such payments shall be valid and effective to fully satisfy and discharge the System's obligations with respect to the principal of, and premium, if any, and interest on the Series C Bonds to the extent of the sum or sums so paid. No person other than DTC shall receive an authenticated Series C Bond for each separate stated maturity or separate "CUSIP" number within a maturity evidencing the obligation of the System to make payments of principal of and premium, if any, and interest on the Series C Bonds pursuant to the General Resolution and this Supplemental Resolution. Upon delivery by DTC to the Fiscal Agent of written notice to the effect that DTC has determined to substitute a new nominee in place of Cede & Co., and subject to the provisions herein with respect to transfers, the word "Cede & Co." in this Supplemental Resolution shall refer to such new nominee of DTC.
- (d) In the event the System determines that it is in the best interest of the Beneficial Owners that they be able to obtain Series C Bond certificates, the System may notify DTC and the Fiscal Agent, whereupon DTC will notify the Participants, of the availability through DTC of the Series C Bond certificates, subject to DTC procedures. In such event, the System shall issue, and the Fiscal Agent shall transfer and exchange, Series C Bond certificates as requested by DTC and any other Series C Bond owners in appropriate amounts. DTC may determine to discontinue providing its services with respect to the Series C Bonds at any time by giving notice to the System and the Fiscal Agent and discharging its responsibilities with respect thereto under applicable law. Under such circumstances (if there is no successor securities depositary), the System and the Fiscal Agent shall be obligated to deliver Series C Bond certificates as described in the General Resolution. In the event Series C Bond certificates are issued, the provisions of the General Resolution shall apply to, among other things, the transfer and

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exchange of such certificates and the method of payment of principal of, Redemption Price, and interest on such certificates. Whenever DTC requests the System and the Fiscal Agent to do so, the Fiscal Agent and the System will cooperate with DTC in taking appropriate action after reasonable notice (i) to make available one or more separate certificates evidencing the Series C Bonds to any DTC Participant having Series C Bonds credited to its DTC account or (ii) to arrange for another securities depositary to maintain custody of certificates evidencing the Series C Bonds.

- (e) Notwithstanding any other provision of the General Resolution or this Supplemental Resolution to the contrary, so long as any Series C Bond is registered in the name of Cede & Co., as nominee of DTC, all payments with respect to the principal of, and premium, if any, and interest on such Series C Bond and all notices with respect to and surrender or delivery of such Series C Bond shall be made and given, respectively, to or by DTC as provided by DTC's operating procedures. Bondholders shall have no lien or security interest in any rebate or refund paid by DTC to the Fiscal Agent which arises from the payment by the Fiscal Agent of principal of or interest on the Series C Bonds in accordance with existing arrangements with DTC.
- (f) In connection with any notice or other communication to be provided to Owners of Series C Bonds pursuant to the General Resolution or this Supplemental Resolution by the System or the Fiscal Agent with respect to any consent or other action to be taken by Owners of Series C Bonds, the System or the Fiscal Agent, as the case may be, shall establish a record date for such consent or other action and give DTC notice of such record date. Notice under this subsection (f) shall be given only when DTC is the sole Owner of the Series C Bonds.

SECTION 2.6. Form of Series C Bonds. Subject to the provisions of the General Resolution, the Series C Bonds shall be in substantially the form of Exhibit A, with necessary and appropriate variations, omissions and insertions as permitted by the General Resolution and this Supplemental Resolution.

#### ARTICLE III

#### DISPOSITION OF PROCEEDS OF SERIES C BONDS AND OTHER FUNDS

SECTION 3.1. <u>Deposits to Accounts or Transfers</u>. Upon receipt from the Underwriters of the proceeds of sale of the Series C Bonds in the amount of \$295,519,764.29, there shall be deposited by the System in or transferred by the System:

- 1. by wire, directly, to the account of the System, the amount of \$285,037,106.65; and
- 2. by wire, directly, to the account of Government Development Bank, the amount of \$1,334,049.66 for costs of issuance; provided, that portions of this amount shall be wired to recipients thereof as directed to the Fiscal Agent in writing by Government Development Bank; and
- 3. by wire, directly to the Fiscal Agent, the amount of \$9,148,607.98 for credit to the Senior Bonds Debt Service Reserve Account.

#### **ARTICLE IV**

#### **MISCELLANEOUS**

SECTION 4.1. <u>Headings</u>. The section headings contained herein are for reference purposes only and will not affect in any way the meaning or interpretation of this Supplemental Resolution.

SECTION 4.2 <u>Governing Law.</u> This Supplemental Resolution shall be governed by, and construed and enforced in accordance with, the laws of the Commonwealth; provided, however, that to the maximum extent permitted by applicable law, the rights, privileges and duties of the Fiscal Agent shall be governed by the law of the jurisdiction in which its Corporate Trust Office is located.

SECTION 4.3 <u>Effective Date</u>. This Supplemental Resolution shall take effect immediately upon adoption by the System; *provided, however,* that this Supplemental Resolution shall only be binding upon the Fiscal Agent upon filing of a copy hereof with the Fiscal Agent.

SECTION 4.4 No Representations of Fiscal Agent. The recitals of fact contained herein and in the Series C Bonds shall be taken as the statements of the System and the Fiscal Agent assumes no responsibility for the correctness of the same. The Fiscal Agent makes no representations as to the validity or sufficiency of the General Resolution or this Supplemental Resolution or of any Bonds issued thereunder or as to the security afforded by the General Resolution or this Supplemental Resolution, and the Fiscal Agent shall incur no liability in respect thereof. The Fiscal Agent shall, however, be responsible for its representation contained in its certificate of authentication on the Series C Bonds.

SECTION 4.5 <u>Notices</u>. Any notice, demand, direction, request or other instrument authorized or required by this Supplemental Resolution to be given to or filed with the System or the Fiscal Agent shall be deemed to have been sufficiently given or filed for all purposes of this Supplemental Resolution if and when delivered:

#### To the System:

Employees Retirement System of the Government of the Commonwealth of Puerto Rico P.O. Box 42003
San Juan, Puerto Rico 00940
437 Ponce de León Avenue
Stop 32½
Hato Rey, Puerto Rico 00918

Telephone: (787) 754-4545 Fax: (787) 250-7251 Attn.: Administrator

#### To the Fiscal Agent:

The Bank of New York 101 Barclay Street Floor 7W New York, New York 10286

Telephone: (212) 815-6955

Fax: (212) 815-5595 or 5596

Attn.: Northern Municipals Department

with a copy to:

Government Development Bank for Puerto Rico P.O. Box 42001 San Juan, Puerto Rico 00940

Roberto Sánchez Vilella Government Center De Diego Avenue, Stop 22 Santurce, Puerto Rico 00940

Attention: Executive Vice President and Financing Director

Phone: (787) 722-2525 Fax: (787) 728-0975

The System or the Fiscal Agent by notice to the other may designate additional or different addresses for subsequent notices or communications. Notwithstanding the foregoing, any notice, demand, request or other instrument to be given or filed with the Fiscal Agent shall be effective only upon receipt by the Fiscal Agent.

The Fiscal Agent shall have the right, but shall not be required, to rely upon and comply with instructions and directions sent by e-mail, facsimile and other similar unsecured electronic methods by persons believed by the Fiscal Agent to be authorized to give instructions and directions on behalf of the System. The Fiscal Agent shall have no duty or obligation to verify or confirm that the person who sent such instructions or directions is, in fact, a person authorized to give instructions or directions on behalf of the System; and the Fiscal Agent shall have no liability for any losses, liabilities, costs or expenses incurred or sustained by the System as a result of such reliance upon or compliance with such instructions or directions. The System agrees to assume all risks arising out of the use of such electronic methods to submit instructions and directions to the Fiscal Agent, including without limitation the risk of the Fiscal Agent acting on unauthorized instructions, and the risk of interception and misuse by third parties.

SECTION 4.6 <u>Invalid Provisions</u>. In case any provision in this Supplemental Resolution or the Series C Bonds shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

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**EXHIBIT A** 

#### FORM OF CURRENT INTEREST TERM BONDS

No. CR
--------

# EMPLOYEES RETIREMENT SYSTEM OF THE GOVERNMENT OF THE COMMONWEALTH OF PUERTO RICO SENIOR PENSION FUNDING BOND SERIES C

DATED DATE	MATURITY DATE	INTEREST RATE	CUSIP NO.
June 30, 2008	1,	%	
REGISTERED OWNER	: Cede & Co.		
PRINCIPAL AMOUNT:			DOLLARS

EMPLOYEES RETIREMENT SYSTEM OF THE GOVERNMENT OF THE

COMMONWEALTH OF PUERTO RICO (herein sometimes called the "System"), a trust created pursuant to Act 447 of May 15, 1951, as amended (the "Act"), to provide pension and other benefits to retired employees of the central government, municipalities and public corporations of the Commonwealth of Puerto Rico (the "Commonwealth"), acknowledges itself indebted, and for value received, hereby promises to pay to the REGISTERED OWNER named above or registered assigns or legal representative, upon presentation and surrender of this Series C Bond at the Corporate Trust Office (as defined in the General Resolution hereinafter mentioned) of the Fiscal Agent hereinafter mentioned on the MATURITY DATE specified above (unless redeemed prior thereto as hereinafter provided), the PRINCIPAL AMOUNT specified above, and to pay interest thereon from the most recent interest payment date to which interest has been paid, or, if no interest has been paid, from the DATED DATE specified above, until the earlier of the maturity or redemption of this Series C Bond, at the per annum INTEREST RATE specified above, payable on each Interest Payment Date (as defined in the Supplemental Resolution hereinafter mentioned), commencing August 1, 2008. Both the principal of and the interest on this Series C Bond are payable in any coin or currency of the United States of America which, on the respective dates of payment thereof, shall be legal tender for the payment of public and private debts. Payment of the interest on this Series C Bond on any interest payment date will be made to the person appearing on the registration books of the System maintained by the Fiscal Agent as the registered owner hereof as of the fifteenth calendar day (whether or not a business day) of the month next preceding such interest payment date, such interest to be paid by check mailed to the registered owner at such registered owner's address or, at the option of a registered owner of at least \$1,000,000 in aggregate principal amount of the Series C Bonds (hereinafter defined) who so requests the Fiscal Agent in writing at least 15 calendar days prior to such interest payment date, by wire transfer.

This Series C Bond is payable by the System solely from the Pledged Property held under the Resolution and does not constitute a debt, obligation or pledge of the full faith, credit and taxing power of the Commonwealth or any of its municipalities or political subdivisions or instrumentalities (other than the System), and neither the Commonwealth nor any of its municipalities or political subdivisions or instrumentalities (other than the System) shall be liable for the payment thereof.

This Series C Bond is one of the bonds of a duly authorized series of bonds in the aggregate principal amount at issuance of \$300,202,930.00 designated "Senior Pension Funding Bonds, Series C" (herein called the "Series C Bonds") authorized to be issued pursuant to an Employees Retirement System of the Government of Puerto Rico Pension Funding Bond Resolution, adopted by the System on January 24, 2008 (herein called the "General Resolution"), as supplemented by a Third Supplemental Pension Funding Bond Resolution, adopted by the System on June 26, 2008 (the "Third Supplemental Resolution," and together with the General Resolution, the "Resolution"). The General Resolution was previously supplemented by a First Supplemental Pension Funding Bond Resolution, adopted by the System on January 24, 2008 and amended and restated by the System on January 29, 2008, pursuant to which the System's Senior Pension Funding Bonds, Series A (the "Series A Bonds") were issued, and by a Second Supplemental Pension Funding Bond Resolution, adopted by the System on May 27, 2008, pursuant to which the System's Senior Pension Funding Bonds, Series B (the "Series B Bonds") were issued. The Series C Bonds, the outstanding Series A Bonds and Series B Bonds, and any additional bonds issued under the Resolution are herein referred to collectively as the "Bonds."

The Bonds are special obligations of the System. There is pledged to the payment of the principal or redemption price of, if any, and interest on the Bonds in accordance with the provisions of the Resolution, the Pledged Property as defined and provided in the Resolution, subject only to the provisions of the Resolution permitting the use and application thereof for the purposes and on the conditions set forth in the Resolution. Such pledge and other obligations of the System may be discharged, wholly or in part, at or prior to the maturity of the Bonds upon the making of provision for the payment of the principal or redemption price of, if any, and interest on the Bonds pursuant to the terms and conditions set forth in the General Resolution.

At the option of the System, and upon 40 days' prior notice, the Series C Bonds are subject to redemption from any moneys available for that purpose (other than from moneys set aside with respect to Sinking Fund Installments) prior to maturity, in whole or in part, and if in part, in such order of maturity as determined by the System, at any time on and after July 1, 2018, at a redemption price equal to the principal amount of the Series C Bonds, plus accrued interest (in the case of the Capital Appreciation Bonds, the Accreted Amount) to the redemption date, and without premium.

If notice of redemption is given and if sufficient funds are on deposit with the Fiscal Agent to provide for the payment of the principal of and premium, if any, and interest (or Accreted Amount, in the case of the Capital Appreciation Bonds) on the Series C Bonds (or portions thereof) to be redeemed, then the Series C Bonds (or portions thereof) so called for redemption will, on the redemption date, cease to bear interest (in the case of the Capital Appreciation Bonds, the Accreted Amount thereof shall cease to increase), and shall no longer be deemed outstanding under or be entitled to any benefit or security under the Resolution.

Copies of the Resolution are on file at the office of the System, and at the Corporate Trust Office of The Bank of New York, as Fiscal Agent under the Resolution (including its successors, herein called the "Fiscal Agent"), and reference to the Resolution and any and all supplements thereto and amendments thereof and to the Act is made for a description of the pledges and covenants securing the Bonds, the nature, extent and manner of enforcement of such pledges and covenants, the terms and conditions upon which Bonds have been issued and additional Bonds may be issued, the rights and remedies of the registered owners of the Bonds with respect thereto, and to other terms and provisions of the Bonds. To the extent and in the manner permitted by the terms of the General Resolution, the provisions of the Resolution or any resolution amendatory thereof or supplemental thereto may be modified or amended.

The registered owner of this Series C Bond shall have no right to enforce the provisions of the Resolution, to institute action to enforce the provisions of the Resolution or to institute, appear in or defend any suit or other proceeding with respect thereto, *except* as provided in the Resolution.

This Series C Bond is transferable, as provided in the Resolution, only upon the books of the System maintained for that purpose at the Corporate Trust Office of the Fiscal Agent by the registered owner hereof in person or by his attorney duly authorized in writing, upon surrender of this Series C Bond together with a written instrument of transfer duly executed by the Bondowner or such Bondowner's attorney duly authorized in writing, and thereupon a new fully registered Series C Bond or Bonds in the same aggregate principal amount, and of the same series, maturity and interest rate, shall be issued to the transferee in exchange therefor as provided in the General Resolution and upon the payment of the charges, if any, therein prescribed. The System and the Fiscal Agent may treat and consider the person in whose name this Series C Bond is registered as the absolute owner hereof for the purpose of receiving payment of, or on account of, the principal or redemption price, if any, hereof and interest due hereon and for all other purposes whatsoever.

This Series C Bond shall not be valid or become obligatory for any purpose or be entitled to any security or benefit under the Resolution until the Certificate of Authentication hereon shall have been signed by the Fiscal Agent.

IT IS HEREBY CERTIFIED, RECITED AND DECLARED that all acts, conditions and things required by the Constitution and statutes of the Commonwealth and the Resolution to exist, to have happened and to have been performed precedent to and in the issuance of this Series C Bond, exist, have happened and have been performed in due time, form and manner as required by law and that the issue of the Bonds, together with all other indebtedness of the System, is within every debt and other limit prescribed by law.

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**IN WITNESS WHEREOF**, the EMPLOYEES RETIREMENT SYSTEM OF THE GOVERNMENT OF THE COMMONWEALTH OF PUERTO RICO has caused this Series C Bond to be executed in its name by the manual or facsimile signature of an authorized representative, as of the DATED DATE specified above.

## EMPLOYEES RETIREMENT SYSTEM OF THE GOVERNMENT OF THE COMMONWEALTH OF PUERTO RICO

	Ву:	Administrator	
[SEAL]			
Attest:			
Secretary or Assistant Secretary	_		

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#### **CERTIFICATE OF AUTHENTICATION**

This Bond is one of the Series C Bonds described in the within-mentioned Resolution.

	THE BANK OF NEW YORK, as Fiscal Agent
	By:Authorized Signatory
Data of Anthontication.	S J

## Case:17-03283-LTS Doc#:7554-21 Filed:06/21/19 Entered:06/21/19 21:37:57 Desc: Exhibit U Page 199 of 217

#### **ASSIGNMENT**

FOR VALUE RECEIVED, the undersigned hereby	sells, assigns, and transfers unto
(please print or typewring	te name and address of transferee)
	or other identifying number of assignee) er record only)
the within Bond and all rights thereunder, and on the books kept for registration thereof, with full p	and hereby irrevocably constitutes and appoints  Attorney to transfer the within Bond bower of substitution in the premises.
Dated:	·
Signature Guaranteed	
By:	
Signatures must be guaranteed by an "eligible guarantor institution" meeting the requirements of the Fiscal Agent, which requirements include membership or participation in the Security Transfer Agent Medallion Program ("STAMP") or such other "signature guarantee program" as may be determined by the Fiscal Agent in addition to, or in substitution for, STAMP, all in accordance with the Securities Exchange Act of 1934, as amended.	

#### FORM OF CAPITAL APPRECIATION BONDS

# EMPLOYEES RETIREMENT SYSTEM OF THE GOVERNMENT OF THE COMMONWEALTH OF PUERTO RICO SENIOR PENSION FUNDING BOND SERIES C

<b>DATED DATE</b>	<b>MATURITY DATE</b>	CUSIP NO.	
June 30, 2008	1,		-
REGISTERED OWNER: C	Cede & Co.		
INITIAL PRINCIPAL AMOUNT: _			_DOLLARS
PRINCIPAL AMOUNT AT MATURITY:			DOLLARS

EMPLOYEES RETIREMENT SYSTEM OF THE GOVERNMENT OF THE COMMONWEALTH OF PUERTO RICO (herein sometimes called the "System"), a trust created pursuant to Act 447 of May 15, 1951, as amended (the "Act"), to provide pension and other benefits to retired employees of the central government, municipalities and public corporations of the Commonwealth of Puerto Rico (the "Commonwealth"), acknowledges itself indebted, and for value received, hereby promises to pay to the REGISTERED OWNER named above or registered assigns or legal representative, upon presentation and surrender of this Series C Bond at the Corporate Trust Office (as defined in the General Resolution hereinafter mentioned) of the Fiscal Agent hereinafter mentioned. on the MATURITY DATE specified above (unless redeemed prior thereto as hereinafter provided), the PRINCIPAL AMOUNT AT MATURITY specified above. The principal (consisting of Accreted Amount) of this Series C Bond is payable in any coin or currency of the United States of America which, on the date of payment thereof, shall be legal tender for the payment of public and private debts. Interest on this Series C Bond shall not be payable on a current basis but shall be compounded, and added to principal, on each July 1 and January 1, commencing January 1, 2009 such that the INITIAL PRINCIPAL AMOUNT specified above shall accrete to equal the PRINCIPAL AMOUNT AT MATURITY specified above on the MATURITY DATE specified above. The Table of Accreted Amounts is attached hereto as Exhibit A.

This Series C Bond is payable by the System solely from the Pledged Property held under the Resolution and does not constitute a debt, obligation or pledge of the full faith, credit and taxing power of the Commonwealth or any of its municipalities or political subdivisions or instrumentalities (other than the System), and neither the Commonwealth nor any of its municipalities or political subdivisions nor instrumentalities (other than the System) shall be liable for the payment thereof.

This Series C Bond is one of the bonds of a duly authorized series of bonds in the aggregate principal amount at issuance of \$300,202,930.00 designated "Senior Pension Funding Bonds, Series C" (herein called the "Series C Bonds") authorized to be issued pursuant to an Employees Retirement System of the Government of Puerto Rico Pension Funding Bond Resolution, adopted by the System on January 24, 2008 (herein called the "General Resolution"), as supplemented by a Third Supplemental Pension Funding Bond Resolution, adopted by the System on June 26, 2008 (the "Third Supplemental Resolution," and together with the General Resolution, the "Resolution"). The General Resolution was previously supplemented by a First Supplemental Pension Funding Bond Resolution, adopted by the System on January 24, 2008 and amended and restated by the System on January 29, 2008, pursuant to which the System's Senior Pension Funding Bonds, Series A (the "Series A Bonds") were issued, and by a Second Supplemental Pension Funding Bond Resolution, adopted by the System on May 27, 2008, pursuant to which the System's Senior Pension Funding Bonds, Series B (the "Series B Bonds") were issued. The Series C Bonds, the outstanding Series A Bonds and Series B Bonds, and any additional bonds issued under the Resolution are herein referred to collectively as the "Bonds."

The Bonds are special obligations of the System. There is pledged to the payment of the principal or redemption price of, if any, and interest on the Bonds in accordance with the provisions of the Resolution, the Pledged Property as defined and provided in the Resolution, subject only to the provisions of the Resolution permitting the use and application thereof for the purposes and on the conditions set forth in the Resolution. Such pledge and other obligations of the System may be discharged, wholly or in part, at or prior to the maturity of the Bonds upon the making of provision for the payment of the principal or redemption price of, if any, and interest on the Bonds pursuant to the terms and conditions set forth in the General Resolution.

At the option of the System, and upon 40 days' prior notice, the Series C Bonds are subject to redemption from any moneys available for that purpose (other than from moneys set aside with respect to Sinking Fund Installments) prior to maturity, in whole or in part, and if in part, in such order of maturity as determined by the System, at any time on and after July 1, 2018, at a redemption price equal to the principal amount of the Series C Bonds, plus accrued interest (in the case of the Capital Appreciation Bonds, the Accreted Amount) to the redemption date, and without premium.

If notice of redemption is given and if sufficient funds are on deposit with the Fiscal Agent to provide for the payment of the principal of and premium, if any, and interest (or Accreted Amount, in the case of the Capital Appreciation Bonds) on the Series C Bonds (or portions thereof) to be redeemed, then the Series C Bonds (or portions thereof) so called for redemption will, on the redemption date, cease to bear interest (in the case of the Capital Appreciation Bonds, the Accreted Amount thereof shall cease to increase), and shall no longer be deemed outstanding under or be entitled to any benefit or security under the Resolution.

Copies of the Resolution are on file at the office of the System, and at the Corporate Trust Office of The Bank of New York, as Fiscal Agent under the Resolution (including its successors, herein called the "Fiscal Agent"), and reference to the Resolution and any and all supplements thereto and amendments thereof and to the Act is made for a description of the pledges and covenants securing the Bonds, the nature, extent and manner of enforcement of such pledges and covenants, the terms and conditions upon which Bonds have been issued and additional Bonds may be issued, the rights and remedies of the registered owners of the Bonds with respect thereto, and to other terms and provisions of the Bonds. To the extent and in the manner permitted by the terms of the General Resolution, the provisions of the Resolution or any resolution amendatory thereof or supplemental thereto may be modified or amended.

The registered owner of this Series C Bond shall have no right to enforce the provisions of the Resolution, to institute action to enforce the provisions of the Resolution or to institute, appear in or defend any suit or other proceeding with respect thereto, *except* as provided in the Resolution.

This Series C Bond is transferable, as provided in the Resolution, only upon the books of the System maintained for that purpose at the Corporate Trust Office of the Fiscal Agent by the registered owner hereof in person or by his attorney duly authorized in writing, upon surrender of this Series C Bond together with a written instrument of transfer duly executed by the Bondowner or such Bondowner's attorney duly authorized in writing, and thereupon a new fully registered Series C Bond or Bonds in the same aggregate principal amount, and of the same series, maturity and interest rate, shall be issued to the transferee in exchange therefor as provided in the General Resolution and upon the payment of the charges, if any, therein prescribed. The System and the Fiscal Agent may treat and consider the person in whose name this Series C Bond is registered as the absolute owner hereof for the purpose of receiving payment of, or on account of, the principal or redemption price, if any, hereof and interest due hereon and for all other purposes whatsoever.

This Series C Bond shall not be valid or become obligatory for any purpose or be entitled to any security or benefit under the Resolution until the Certificate of Authentication hereon shall have been signed by the Fiscal Agent.

IT IS HEREBY CERTIFIED, RECITED AND DECLARED that all acts, conditions and things required by the Constitution and statutes of the Commonwealth and the Resolution to exist, to have happened and to have been performed precedent to and in the issuance of this Series C Bond, exist, have happened and have been performed in due time, form and manner as required by law and that the issue of the Series C Bonds, together with all other indebtedness of the System, is within every debt and other limit prescribed by law.

### Case:17-03283-LTS Doc#:7554-21 Filed:06/21/19 Entered:06/21/19 21:37:57 Desc: Exhibit U Page 203 of 217

**IN WITNESS WHEREOF**, the EMPLOYEES RETIREMENT SYSTEM OF THE GOVERNMENT OF THE COMMONWEALTH OF PUERTO RICO has caused this Series C Bond to be executed in its name by the manual or facsimile signature of an authorized representative, as of the DATED DATE specified above

## EMPLOYEES RETIREMENT SYSTEM OF THE GOVERNMENT OF THE COMMONWEALTH OF PUERTO RICO

	Ву:	Administrator	
		1 101111110 12 0000 2	
[SEAL]			
Attest:			
Secretary or Assistant Secretary			

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#### **CERTIFICATE OF AUTHENTICATION**

This Bond is one of the Series C Bonds described in the within-mentioned Resolution.

	THE BANK OF NEW YORK, as Fiscal Agent
	By:Authorized Signatory
Date of Authentication:	

#### **ASSIGNMENT**

FOR	VALU	E REC	EIVE	D, tł	ne under	rsigned hereb	y sells	s, assigns	s, and transfers unto	
	(please print or typewrite name and address of transferee)									
	(please insert social security or other identifying number of assignee) (For computer record only)									
									irrevocably constitutes and appoints _ Attorney to transfer the within Bond stitution in the premises.	
Signa	ature G	uarante	ed							
							_			
By:							_			
guara the l mem	antor in Fiscal bership	stitution Agent, or p	n" me whic partici	eting ch re patio	g the receipt the receipt grant gran	an "eligible quirements of ents include the Security ("STAMP")				

or such other "signature guarantee program" as may be determined by the Fiscal Agent in addition to, or in substitution for, STAMP, all in accordance with the Securities Exchange Act of

1934, as amended.

**Appendix VII** 

#### Form of Opinion of Bond Counsel

#### FIDDLER GONZALEZ & RODRIGUEZ, P.S.C.

Attorneys and Counsellors at Law PO Box 363507 San Juan, PR 00936-3507

TELEPHONE (787) 753-3113 FAX (787) 759-3123 254 Muñoz Rivera Avenue Corner Chardón Street 6™ Floor San Juan, Puerto Rico 00918

June 30, 2008

Employees Retirement System of the Government of the Commonwealth of Puerto Rico 437 Ponce de León Avenue San Juan, Puerto Rico

Re: Employees Retirement System of the Government of the

Commonwealth of Puerto Rico Pension Funding Bonds, Series C Bonds

#### Ladies and Gentlemen:

We have examined the Constitution and the laws of the Commonwealth of Puerto Rico (the "Commonwealth"), including Act No. 447 of the Legislature of Puerto Rico, approved May 15, 1951, as amended and supplemented (the "Act"), creating the Employees Retirement System of the Government of the Commonwealth of Puerto Rico (the "System") as a trust, to provide pension and other benefits to retired employees of the central government, municipalities and public Systems of the Commonwealth.

We have also examined a certified copy of a Pension Funding Bond Resolution (the "General Resolution), adopted by the Board of Trustees of the System on January 24, 2008, and a Third Supplemental Pension Funding Bond Resolution, adopted by the Board of Trustees of the System on June 26, 2008 (the "Supplemental Resolution," and together with the General Resolution, the "Resolution"), and other proofs submitted relative to the issuance of the System's Senior Pension Funding Bonds, Series C in the aggregate principal amount of \$300,202,930.00 (the "Bonds"). Capitalized words not defined herein shall have the meanings ascribed to them in the Resolution.

The Bonds are issuable as fully registered bonds, without coupons, in denominations of \$5,000 (maturity amount) each or integral multiples thereof.

The Bonds are issued under and pursuant to the Resolution for the purpose of (i) increasing the total assets currently available to pay benefits under the System's largest defined benefit plan, (ii) reducing the unfunded accrued actuarial pension liability of the benefit plan, and (iii) making deposits in various funds and accounts established under the Resolution.

The Bonds are limited, non-recourse obligations of the System, payable solely from and secured by a pledge and assignment of Employer Contributions and all other Revenues (as defined in the Resolution) derived therefrom, certain funds held under the Resolution, together with income earned thereon (collectively referred to herein as the "Pledged Property"), pledged therefor under the Resolution.

The Bonds bear interest and are subject to redemption prior to maturity as set forth in the Resolution.

The principal of the Bonds is payable at the principal corporate trust office of the Fiscal Agent in New York, New York. The interest on the Bonds is payable by check mailed to the registered owner at the address appearing on the registration books of the System on the relevant record date or, in certain circumstances set forth in the Resolution, by wire transfer to a designated account.

From such examination, and having regard to legal questions we deem relevant, we are of the opinion that:

- (1) The Act is valid in all respects material to this opinion, and the System is a duly constituted governmental instrumentality of the Commonwealth, deemed as a trust.
- (2) The Resolution has been duly adopted by, and is legal, valid and binding upon, the System, enforceable in accordance with its terms.
- (3) The Bonds have been duly authorized by the System and constitute legal, valid and binding limited obligations of the System payable solely from, and secured by a valid and binding pledge of, the Pledged Property, subject only to the provisions of the Resolution permitting use of such Pledged Property and its application for the purposes and on the terms and conditions provided in the Resolution.
- (4) The Bonds do not constitute a debt, obligation or pledge of the full faith, credit or taxing power of the Commonwealth or any of its municipalities or political subdivisions or instrumentalities (other than the System), and neither the Commonwealth nor any of its municipalities or political subdivisions or instrumentalities (other than the System), shall be liable for the payment thereof.
- (5) Interest on the Bonds is excluded from gross income and exempt from Puerto Rico income and withholding taxes, including the alternative minimum tax imposed by Section 1017 of the Puerto Rico Internal Revenue Code of 1994, as amended (the "P.R. Code").
- (6) The Bonds are exempt from property taxes imposed by the Municipal Property Tax Act of 1991, as amended, and interest thereon is exempt from the municipal license tax imposed by the Municipal License Tax Act of 1974, as amended.
- (7) The transfer of the Bonds by (i) gift will not be subject to gift tax under the P.R. Code in the case of donors who are residents of the Commonwealth at the time the gift is made, and (ii) death will not be subject to estate tax under the P.R. Code in the case of a decedent who at the time of death was (x) a resident of Puerto Rico, and (y) a United States citizen who acquired such citizenship solely by reason of birth or residence in Puerto Rico.
- (8) Gain recognized from the sale or exchange of a Bond will be subject to income tax under the P.R. Code to taxpayers subject to Puerto Rico income tax on such gains, including individuals residing in Puerto Rico and corporations and partnerships organized under the laws of the Commonwealth.

- (9) The Bonds will be considered an obligation of an instrumentality of Puerto Rico for purposes of (i) the non-recognition of gain rules of Section 1112(f)(2)(A) of the P.R. Code applicable to certain involuntary conversions, and (ii) the exemption from the surtax imposed by Section 1102 of the P.R. Code available to corporations and partnerships that have a certain percentage of their net income invested in obligations of instrumentalities of Puerto Rico and certain other investments.
- (10) Interest on the Bonds constitutes "industrial development income" under Section 2(j) of the Puerto Rico Industrial Incentives Act of 1963, the Puerto Rico Industrial Incentives Act of 1978, the Puerto Rico Tax Incentives Act of 1987, and the Puerto Rico Tax Incentives Act of 1998, as amended (collectively, the "Acts"), when received by a holder of a grant of tax exemption issued under any of the Acts that acquired the Bonds with "eligible funds," as such term is defined in the Acts.

Based on the provisions of the United States Internal Revenue of 1986, as amended (the "U.S. Code"), and the regulations thereunder, now in force:

- (1) Interest on the Bonds received by, or "original issue discount" (within the meaning of the U.S. Code) accrued to, an individual who is a *bona fide* resident of Puerto Rico within the meaning of Section 937 of the U.S. Code during the entire taxable year in which such interest is received or "original issue discount" is accrued will constitute gross income from sources within Puerto Rico and, therefore, is excludable from gross income for purposes of the U.S. Code pursuant to section 933(1) thereof.
- (2) Interest received or accrued, or original issue discount, on the Bonds is not subject to United States federal income tax if the holder of the Bonds is a corporation organized under the laws of Puerto Rico ("Puerto Rico Corporation") and such interest is not effectively connected with the conduct of a trade or business in the United States by such Puerto Rico Corporation, such Puerto Rico Corporation is not a foreign personal holding company, a controlled foreign corporation or a passive foreign investment company under the U.S. Code, and such Puerto Rico Corporation is not treated as a domestic corporation for the purposes of the U.S. Code.
- (3) Interest on the Bonds is not excludable from the gross income of the recipient thereof for federal income tax purposes under Section 103(a) of the U.S. Code.
- (4) Pursuant to the provisions of Section 1.937-2 of the Regulations issued under the U.S. Code, the source of the income from the sale of personal property by a bona fide resident of Puerto Rico within the meaning of Section 937 of the Code shall be determined under the rules of Section 865 of the U.S. Code. Accordingly, the gain on the sale or exchange of the Bonds recognized by an individual who is a *bona fide* resident of Puerto Rico, within the meaning of Section 937 of the U.S. Code, during the entire taxable year in which the source of the gain must be determined, will constitute Puerto Rico source income and, therefore, qualify for the income exclusion under in Section 933(1) of the U.S. Code, provided (i) that such Bonds do not constitute inventory in the hands of such individual and (ii) if the Bonds were owned before the individual became a bona fide resident of Puerto Rico, that for any of the 10 years preceding the taxable year for which the source of the gain must be determined, the individual was not a resident of the United States (other than a bona fide resident of Puerto Rico).

A Puerto Rico Corporation that invests in the Bonds will be subject to U.S. federal income tax on a gain from a disposition of Bonds only if the gain is effectively connected to a U.S. trade or business carried on by the Puerto Rico Corporation.

(5) The transfer of the Bonds by death or gift will not be subject to estate or gift tax under the U.S. Code in the case of decedents or donors who, at the time of death or gift, are (a) residents of Puerto Rico and (b) (i) United States citizens that acquired such citizenship solely by reason of birth or residence in Puerto Rico or (ii) not United States citizens.

In addition to the opinions above we would like to bring to your attention that: (a) the P.R. Code does not provide rules with respect to the treatment of the excess, if any, of the amount due at maturity of a Bond over its initial offering price (the "Accretion Amount") and that under the current administrative practice followed by the Puerto Rico Department of the Treasury, the Accretion Amount is treated as interest; (b) prospective owners of the Bonds, including but not limited to financial institutions, should be aware that ownership of the Bonds may result in having a portion of their interest and other expenses attributable to interest on the Bonds disallowed as deductions for purposes of computing the regular tax and the alternative minimum tax for Puerto Rico income tax purposes; and (c) the U.S. Code provides special rules for the taxation of shareholders of foreign corporations that qualify as "controlled foreign corporations," "personal holding companies," "foreign personal holding companies" or "passive foreign investment companies," as such terms are defined by the U.S. Code.

In connection with the foregoing statements about certain United States federal tax consequences arising from the ownership of, receipt or accrual of interest on, or the disposition of the Bonds, be advised that pursuant to the U. S. Internal Revenue Service Circular No. 230:

- (a) These tax statements are not intended or written to be used, and cannot be used by any taxpayer, for purposes of avoiding penalties that may be imposed on the taxpayer by the Internal Revenue Service.
- (b) These statements were written in connection with the promotion or marketing of the Bonds.
- (c) Each prospective purchaser of the Bonds should seek tax advice from an independent tax advisor based on its particular circumstances.

We express no opinion regarding any other federal, Commonwealth or state tax consequences with respect to the Bonds. We are rendering our opinion under existing statutes and court decisions, and regulations as of the issue date, and assume no obligation to update our opinion after the issue date to reflect any future action, fact or circumstance, or change in law or interpretation, or otherwise.

In rendering this opinion, we are advising you that the enforceability of the Bonds and the Resolution may be limited by bankruptcy, moratorium, insolvency, or other laws affecting creditors' rights or remedies and is subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

We have also examined an executed Bond and in our opinion the form of said Bond and its execution are regular and proper.

Very truly yours,

**Appendix VIII** 

#### **BOOK-ENTRY SYSTEM**

#### **The Depository Trust Company**

DTC will act as securities depository for the Series C Bonds. The Series C Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee). One fully-registered Bond certificate will be issued for each stated maturity of the Series C Bonds, each in the aggregate principal amount (initial principal amount in the case of the Capital Appreciation Bonds) of such maturity, and will be deposited with DTC. SO LONG AS CEDE & CO. IS THE REGISTERED OWNER OF THE SERIES C BONDS, AS NOMINEE FOR DTC, REFERENCES HEREIN TO BONDHOLDERS OR OWNERS OF THE SERIES C BONDS (OTHER THAN UNDER THE CAPTION "TAX MATTERS") SHALL MEAN CEDE & CO. AND SHALL NOT MEAN THE BENEFICIAL OWNERS OF THE SERIES C BONDS.

DTC, the world's largest depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). DTC holds and provides asset servicing for over 2.2 million issues of U.S. and non-U.S. equity, corporate and municipal debt issues, and money market instruments from over 100 countries that DTC's Participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC, in turn, is owned by a number of Direct Participants of DTC and Members of the National Securities Clearing Corporation, Fixed Income Clearing Corporation, and Emerging Markets Clearing Corporation, (NSCC, FICC, and EMCC, also subsidiaries of DTCC), as well as by the New York Stock Exchange, Inc., the American Stock Exchange LLC, and the National Association of Securities Dealers, Inc. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has S&P's highest rating; AAA. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission ("SEC"). More information about DTC can be found at www.dtcc.com and www.dtc.org.

Purchases of the Series C Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series C Bonds on DTC's records. The ownership interest of each actual purchaser of the Series C Bonds ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction.

Transfers of ownership interests in the Series C Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners

will not receive certificates representing their ownership interests in the Series C Bonds, except in the event that use of the book-entry system for the Series C Bonds is discontinued.

To facilitate subsequent transfers, the Series C Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of the Series C Bonds with DTC and their registration in the name of Cede & Co. or such other nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series C Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series C Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Redemption notices shall be sent to DTC. If less than all of the Series C Bonds are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. (nor such other DTC nominee) will consent or vote with respect to Series C Bonds unless authorized by a Direct Participant in accordance with DTC's Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the System as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Series C Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Redemption proceeds, distributions, and dividend payments on the Series C Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the System or the Fiscal Agent on payable dates in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Fiscal Agent, or the System, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the System or the Fiscal Agent, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as securities depository with respect to the Series C Bonds at any time by giving reasonable notice to the System or the Fiscal Agent. Under such circumstances, in the event that a successor depository is not obtained, Series C Bond certificates are required to be printed and delivered.

The System may decide to discontinue use of the system of book-entry only transfers through DTC (or a successor securities depository). In that event, Series C Bond certificates will be printed and delivered to DTC.

NONE OF THE SYSTEM, THE FISCAL AGENT OR THE UNDERWRITERS WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO DIRECT PARTICIPANTS, INDIRECT PARTICIPANTS OR ANY BENEFICIAL OWNER WITH RESPECT TO (I) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC, ANY PARTICIPANT OR INDIRECT PARTICIPANT; (II) THE PAYMENT BY DTC OR ANY DIRECT PARTICIPANT OR INDIRECT PARTICIPANT OF ANY AMOUNT WITH RESPECT TO THE PRINCIPAL OF, OR PREMIUM, IF ANY, OR INTEREST ON, THE SERIES C BONDS; (III) ANY NOTICE WHICH IS PERMITTED OR REQUIRED TO BE GIVEN TO BONDHOLDERS; (IV) ANY CONSENT GIVEN BY DTC OR OTHER ACTION TAKEN BY DTC AS A BONDHOLDER; OR (V) THE SELECTION BY DTC OR ANY DIRECT PARTICIPANT OR INDIRECT PARTICIPANT OF ANY BENEFICIAL OWNERS TO RECEIVE PAYMENT IN THE EVENT OF ANY PARTIAL REDEMPTION OF THE SERIES C BONDS.

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Appendix IX

Table of Accreted Amounts per \$5000 maturity amount

Date	2030 CAB
06/30/08	1,223.85
1/1/2009	1,263.85
7/1/2009	1,304.90
1/1/2010	1,347.30
7/1/2010	1,391.10
1/1/2011	1,436.30
7/1/2011	1,483.00
1/1/2012	1,531.20
7/1/2012	1,580.95
1/1/2013	1,632.35
7/1/2013	1,685.40
1/1/2014	1,740.15
7/1/2014	1,796.75
1/1/2015	1,855.10
7/1/2015	1,915.40
1/1/2016	1,977.65
7/1/2016	2,041.95
1/1/2017	2,108.30
7/1/2017	2,176.80
1/1/2018	2,247.55
7/1/2018	2,320.60
1/1/2019	2,396.05
7/1/2019	2,473.90
1/1/2020	2,554.30
7/1/2020	2,637.35
1/1/2021	2,723.05
7/1/2021	2,811.55
1/1/2022	2,902.90
7/1/2022	2,997.25
1/1/2023	3,094.70
7/1/2023	3,195.25
1/1/2024	3,299.10
7/1/2024	3,406.35
1/1/2025	3,517.05
7/1/2025	3,631.35
1/1/2026	3,749.35
7/1/2026	3,871.20
1/1/2027	3,997.05
7/1/2027	4,126.95
1/1/2028	4,261.05
7/1/2028	4,399.55
1/1/2029	4,542.55
7/1/2029	4,690.15
1/1/2030	4,842.60
7/1/2030	5,000.00

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